

10/ 647,156

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NEWS 9 MAY 30 The F-Term thesaurus is now available in CA/CAPLUS
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NEWS 11 JUN 26 TULSA/TULSA2 reloaded and enhanced with new search and
and display fields
NEWS 12 JUN 28 Price changes in full-text patent databases EPFULL and PCTFULL
NEWS 13 JUL 11 CHEMSAFE reloaded and enhanced
NEWS 14 JUL 14 FSTA enhanced with Japanese patents
NEWS 15 JUL 19 Coverage of Research Disclosure reinstated in DWPI

NEWS EXPRESS JUNE 30 CURRENT WINDOWS VERSION IS V8.01b, CURRENT
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 26 JUNE 2006.

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FILE 'HOME' ENTERED AT 09:36:41 ON 27 JUL 2006

=> file reg

COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 0.21 | 0.21 |

FULL ESTIMATED COST

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STRUCTURE FILE UPDATES: 25 JUL 2006 HIGHEST RN 896142-63-5
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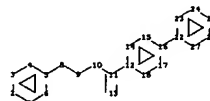
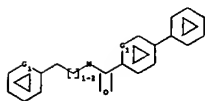
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=>

Uploading C:\Program Files\Stnexp\Queries\10647156.str



chain nodes :

9 10 11 13

ring nodes :

1 2 3 4 5 6 12 14 15 16 17 18 22 23 24 25 26 27

ring/chain nodes :

8

chain bonds :

5-8 8-9 9-10 10-11 11-12 11-13 16-22

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 12-14 12-18 14-15 15-16 16-17 17-18 22-23
22-27 23-24 24-25 25-26 26-27

10/ 647,156

exact/norm bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-8 8-9 9-10 10-11 11-12 11-13 12-14 12-18
14-15 15-16 16-17 16-22 17-18

normalized bonds :

22-23 22-27 23-24 24-25 25-26 26-27

isolated ring systems :

containing 1 : 12 : 22 :

G1:C,N

Match level :

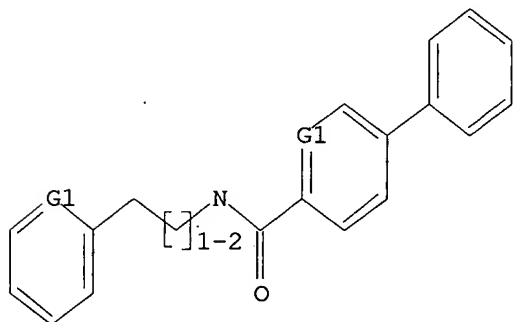
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:Atom 13:CLASS 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 22:Atom
23:Atom 24:Atom 25:Atom 26:Atom 27:Atom

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



G1 C,N

Structure attributes must be viewed using STN Express query preparation.

=> s l1 sample

SAMPLE SEARCH INITIATED 09:37:22 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 1223 TO ITERATE

100.0% PROCESSED 1223 ITERATIONS

43 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 22362 TO 26558

PROJECTED ANSWERS: 466 TO 1252

L2 43 SEA SSS SAM L1

=> s l1 ful

FULL SEARCH INITIATED 09:37:31 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 24631 TO ITERATE

10/ 647,156

100.0% PROCESSED 24631 ITERATIONS
SEARCH TIME: 00.00.01

892 ANSWERS

L3 892 SEA SSS FUL L1

=> file hcaplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

166.94

167.15

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FILE COVERS 1907 - 27 Jul 2006 VOL 145 ISS 5
FILE LAST UPDATED: 26 Jul 2006 (20060726/ED)

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=> d his

(FILE 'HOME' ENTERED AT 09:36:41 ON 27 JUL 2006)

FILE 'REGISTRY' ENTERED AT 09:36:54 ON 27 JUL 2006

L1 STRUCTURE UPLOADED

L2 43 S L1 SAMPLE

L3 892 S L1 FUL

FILE 'HCAPLUS' ENTERED AT 09:37:39 ON 27 JUL 2006

=> s l3

L4 177 L3

=> d his

(FILE 'HOME' ENTERED AT 09:36:41 ON 27 JUL 2006)

FILE 'REGISTRY' ENTERED AT 09:36:54 ON 27 JUL 2006

L1 STRUCTURE UPLOADED

L2 43 S L1 SAMPLE

L3 892 S L1 FUL

FILE 'HCAPLUS' ENTERED AT 09:37:39 ON 27 JUL 2006

L4 177 S L3

=> d l4 1- ibib abs fhitr

10/ 647,156

YOU HAVE REQUESTED DATA FROM 177 ANSWERS - CONTINUE? Y/(N):y

L4 ANSWER 1 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:439887 HCAPLUS

DOCUMENT NUMBER: 144:468206

TITLE: Preparation of piperazinyphenyl and piperazinyipyridinyl lactams and analogs as ligands for 5HT1B receptors

INVENTOR(S): Butler, Todd William

PATENT ASSIGNEE(S): Pfizer Products Inc., USA

SOURCE: PCT Int. Appl., 101 pp.

CODEN: FIXXD2

DOCUMENT TYPE: Patent

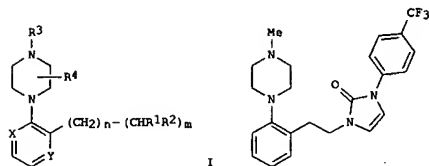
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

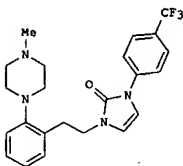
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2006048727 | A1 | 20060511 | WO 2005-133252 | 20051021 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |

PRIORITY APPLN. INFO.: US 2004-624291P P 20041102 GI



I



II

AB Title compds. I [wherein R1 = (un)substituted 1,3-dihydro-2-oxoimidazolyl, 1,2,3,4-tetrahydroisoquinolinyl, etc.; R2 - R4 = H, alkyl, alkylphenyl, etc.; X, Y = CH or N; m, n = 0 or 1, with limitations] and their pharmaceutically acceptable salts were prepared as ligands of serotonin receptors 1 (5HT1), especially as 5HT1B receptor inhibitors. For instance,

II

L4 ANSWER 2 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:383792 HCAPLUS

DOCUMENT NUMBER: 144:433103

TITLE: Preparation of biphenyl-4-ylcarbonyl amino acid derivatives for the treatment of obesity

INVENTOR(S): Smith, Roger; O'Connor, Stephen J.; Coish, Philip; Lowe, Derek; Clark, Roger B.; Stebbins, Jeffrey; Campbell, Ann-Marie; Akuche, Christiana; Shelekhin, Tatiana

PATENT ASSIGNEE(S): Bayer Pharmaceuticals Corporation, USA

SOURCE: PCT Int. Appl., 123 pp.

CODEN: FIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

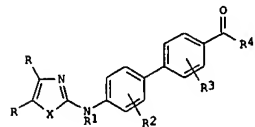
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2006044775 | A2 | 20060427 | WO 2005-US37215 | 20051014 |
| WO 2006044775 | A3 | 20060615 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |

PRIORITY APPLN. INFO.: US 2004-618975P P 20041015

OTHER SOURCE(S): MARPAT 144:433103

GI



I

AB The invention relates to biphenyl-4-ylcarbonyl amino acid compds. I [X is O, S, NH, alkyl- or hydroxyalkylimino; R2 is (un)substituted benzo or pyridino; R1 is H, alkyl, hydroxyalkyl; R2, R3 are independently H, halo, OH, alkyl, CF3, alkoxy, CF3O; R4 is an amino acid residue] and their pharmaceutically-acceptable salts or esters for treating or preventing obesity and related diseases. Thus, N-[[3'-fluoro-4'-[(6-fluoro-1,3-benzothiazol-2-yl)amino]biphenyl-4-yl]carbonyl]-L-valine was prepared via coupling reactions of N-(4-bromo-2-fluorophenyl)-6-fluoro-1,3-benzothiazol-2-amine, 4-(methoxycarbonylphenyl)boronic acid, and L-valine Me ester hydrochloride.

IT 884858-38-2P

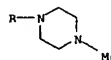
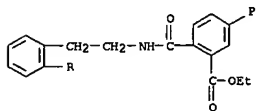
L4 ANSWER 1 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

was synthesized in 66% yield by Cu-mediated coupling of imidazolone (prepn. given) with 4-bromobenzotrifluoride in the presence of, Cul, K2CO3 and N,N'-dimethylethylenediamine in toluene at 110-120°C for 24 h. Tested compds. I had inhibition against 5HT1B receptor with IC50 values of < 500 nM. Therefore, I and pharmaceutical compns. thereof are useful for treating or preventing depression, anxiety, obsessive compulsive disorder (OCD), and other disorders for which selective antagonists, inverse agonists and partial agonists of 5HT1 receptors, specifically, antagonists of 5-HT1B receptors are useful.

IT RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of piperazinyphenyl and piperazinyipyridinyl lactams and analogs as 5HT1B receptor inhibitors)

RN 886592-68-3 HCAPLUS

CN [1,1'-Biphenyl]-3-carboxylic acid, 4-[[[2-(4-methyl-1-piperaziny)phenyl]ethyl]amino]carbonyl]-, ethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

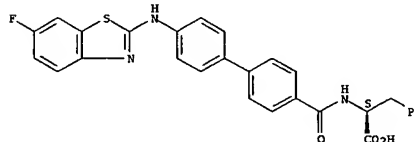
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of biphenyl-4-ylcarbonyl amino acid deriva. for treating obesity)

RN 884858-38-2 HCAPLUS

CN L-Phenylalanine, N-[[[4'-[(6-fluoro-2-benzothiazolyl)amino][1,1'-biphenyl]-4-yl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 3 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:317333 HCAPLUS

DOCUMENT NUMBER: 144:363075

TITLE: Use of inhibitors of 24-hydroxylase in combination with other agents for the treatment of cancer

INVENTOR(S): Polvino, William J.

PATENT ASSIGNEE(S): Sapphire Therapeutics, Inc., USA

SOURCE: PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2006036892 | A2 | 20060406 | WO 2005-US34410 | 20050923 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, GU, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SN, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VE, VU, ZA, ZM, ZW | | | |
| RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |

US 2006078494 A1 20060413 US 2005-234552 20050923

PRIORITY APPLN. INFO.: US 2004-612712P P 20040924

OTHER SOURCE(S): MARPAT 144:363075

AB The invention discloses a method for treating cancer in a subject. The method comprises administering to a subject suffering from cancer a therapeutically effective amount of a 24-hydroxylase inhibitor in combination with a second amount of a suitable cancer therapeutic. The 24-hydroxylase inhibitor can be coadministered with a chemotherapeutic agent, such as an antitumor antibiotic (e.g., mitoxantrone or bleomycin), an alkylating agent (e.g., estramustine or melphalan), a plant alkaloid (e.g., taxanes such as paclitaxel or docetaxel or viva alkaloids such as vincristine or vinblastine) or a combination thereof. In addnl. therapy, the 24-hydroxylase inhibitor can be coadministered as an adjuvant to radiation therapy, such as an external beam irradiation or a radioisotope therapy, such as radiopharmaceutical therapy. Further, the 24-hydroxylase inhibitor can be coadministered as part of a combination therapy that includes hormonal ablation.

IT 174262-09-0, (R)-SDZ 285428

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(vitamin D 24-hydroxylase inhibitor combination with other agent for treatment of cancer)

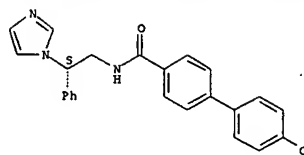
RN 174262-09-0 HCAPLUS

CN [1,1'-Biphenyl]-4-carboxamide, 4'-chloro-N-[(2S)-2-(1H-imidazol-1-yl)-2-phenylethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

L4 ANSWER 3 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

(Continued)



L4 ANSWER 4 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:296607 HCAPLUS

DOCUMENT NUMBER: 144:343555

TITLE: Use of inhibitors of 24-hydroxylase in the treatment of cancer

INVENTOR(S): Miettinen, Susanna; Ylikomi, Timo; Lou, Yan-Ru;

Ahonen, Merja; Tuohimaa, Pentti

SOURCE: PCT Int. Appl., 90 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2006032299 | A1 | 20060330 | WO 2004-EP11951 | 20041019 |
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| RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |

US 2006074109 A1 20060406 US 2005-234941 20050926

WO 2006037023 A2 20060406 WO 2005-US34776 20050926

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, GU, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SN, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VE, VU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2004-612714P P 20040924

WO 2004-EP11951 A 20041019

OTHER SOURCE(S): MARPAT 144:343555

AB The present invention relates to a method of treating cancer in a subject. The method comprises administering to a subject suffering from cancer a therapeutically effective amount of a 24-hydroxylase inhibitor, preferably N-[4-(4-chlorophenyl)benzoyl]-2-(1H-imidazol-1-yl) 2(R)-phenyl-1-aminoethane (VID 400). In certain embodiments, the 24-hydroxylase inhibitor can be coadministered with calcitriol.

IT 174262-10-3, VID 400

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(use of inhibitors of 24-hydroxylase in treatment of cancer and combination with calcitriol)

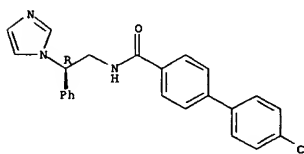
RN 174262-10-3 HCAPLUS

CN [1,1'-Biphenyl]-4-carboxamide, 4'-chloro-N-[(2R)-2-(1H-imidazol-1-yl)-2-phenylethyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 4 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

(Continued)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:267389 HCAPLUS

DOCUMENT NUMBER: 144:463157

TITLE: Slow-Binding Human Serine Racemase Inhibitors from High-Throughput Screening of Combinatorial Libraries
AUTHOR(S): Dixon, Seth M.; Li, Pu; Liu, Ruiwu; Wolosker, Herman; Lam, Kit S.; Kurth, Mark J.; Toney, Michael D.
CORPORATE SOURCE: Department of Chemistry, University of California, Davis, CA, 95616, USA

SOURCE: Journal of Medicinal Chemistry (2006), 49(8), 2388-2397
CODEN: JMCHAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB One-bead one-compound combinatorial chemical together with a high-throughput screen based on fluorescently labeled enzyme allowed the identification of slow binding inhibitors of human serine racemase (hSR). A peptide library of topog. segregated encoded resin beads was synthesized, and several hSR-binding compds. were isolated, identified, and resynthesized for further kinetic study. Of these, several showed inhibitory effects with moderate potency (high micromolar K_is) toward hSR. A clear structural motif was identified consisting of 3-phenylpropionic acid and histidine moieties. Importantly, the inhibitors identified showed no structural similarities to the natural substrate, L-serine. Detailed kinetic analyses of the properties of selected inhibitors show that the screening protocol used here selectively identifies slow binding inhibitors. They provide a pharmacophore for the future isolation of more potent ligands that may prove useful in probing and understanding the biol. role of hSR.

IT 886448-23-3P

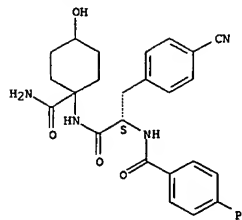
RL: BSU (Biological study, unclassified); CPN (Combinatorial preparation); PRP (Properties); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation)
(slow-binding human serine racemase inhibitors from high-throughput screening of combinatorial libraries)

RN 886448-23-3 HCAPLUS

CN [1,1'-Biphenyl]-4-carboxamide, N-[(1S)-2-[[1-(aminocarbonyl)-4-hydroxycyclohexyl]amino]-1-[(4-cyanophenyl)methyl]-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 5 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



REFERENCE COUNT: 61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:167645 HCAPLUS

DOCUMENT NUMBER: 144:226311

TITLE: New peptidic and peptidoid bradykinin B1 receptor antagonists and uses thereof
INVENTOR(S): Guerin, Brigitte; Battistini, Bruno; Gobeil, Fernand, Jr.; Nantel, Francois; Neugebauer, Witold; Plante, Gerard E.; Regoli, Domenico; Siros, Pierre
PATENT ASSIGNEE(S): Universite de Sherbrooke, Can.
SOURCE: PCT Int. Appl., 36 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2006/017938 | A1 | 20060223 | WO 2005-CA1268 | 20050819 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |

PRIORITY APPLN. INFO.: US 2004-602626P P 20040819
AB The present invention provides for new peptidic and peptidoid Bradykinin B1 receptor antagonists of formula R-(Aaa0-Arg1-Aaa2-Aaa3-Aaa4-Aaa5-Ser6-D-Arg7-Aaa8-OH)x having good to excellent affinities and selectivity for the BKB1 receptor, and increased resistance to enzymic degradation, superior pharmacokinetic properties, both in vitro and in vivo, with capability to significantly prevent and treat conditions wherein BKB1Rs are induced and over-expressed.

IT 876619-75-9P

RL: PAC (Pharmacological activity); PNU (Preparation, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(peptidic and peptidoid bradykinin B1 receptor antagonists for therapeutic use)

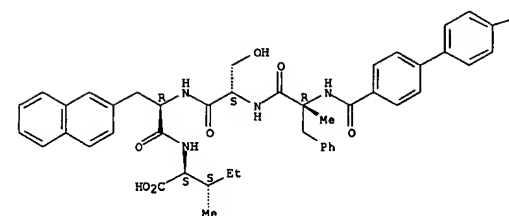
RN 876619-75-9 HCAPLUS

CN L-Isoleucine, N2-acetyl-L-ornithyl-L-arginyl-4'-[(aminomethyl)[1,1'-biphenyl]-4-carbonyl-α-methyl-D-phenylalanyl-L-seryl-3-(2-naphthalenyl)-D-alanyl- (9CI) (CA INDEX NAME)

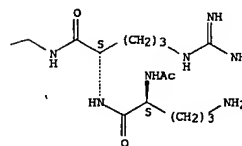
Absolute stereochemistry.

L4 ANSWER 6 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

PAGE 1-A



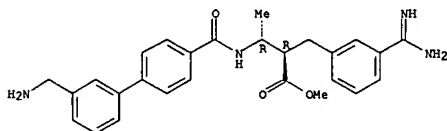
PAGE 1-B



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

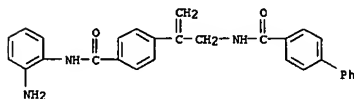
L4 ANSWER 7 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 2006:165187 HCAPLUS
 DOCUMENT NUMBER: 144:304521
 TITLE: Comparative study of factor Xa inhibitors using molecular docking/SVM/HQSAR/3D-QSAR methods
 AUTHOR(S): Sun, Jing; Chen, Hai Feng; Xia, Hai Rong; Yao, Jian Hua; Fan, Bo Tao
 CORPORATE SOURCE: Laboratory of Computer Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai, 200032, Peop. Rep. China
 SOURCE: QSAR & Combinatorial Science (2006), 25(1), 25-45
 CODEN: QCSSAU; ISSN: 1611-020X
 PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The binding modes of a group of Factor Xa (fXa) inhibitors were studied using FlexX, COMFA, CoMSIA, HQSAR and SVM models for inhibition potency were constructed with the conformers obtained from the mol. docking. 3D-QSAR models for oral bioavailability were also constructed with the subset inhibitors. The results show that these models possess good prediction ability. The influence of substituents for the activity and oral bioavailability were explored by comparing the constructed 3D-QSAR models. We found that some substituents have consistent effects on inhibition potency and oral bioavailability, but some have inconsistent effects. We observed equally that the different methods involved in this study, such as mol. docking, SVM, HQSAR and 3D-QSAR models, could be used not only for the prediction, but they are also complementary each to other. They are helpful for better understanding the interaction mechanism between inhibitors and fXa receptor.
 IT 296761-71-2, RPRI28515
 RL: PAC (Pharmacological activity); BIOL (Biological study) (comparative study of factor Xa inhibitors using mol. docking/SVM/HQSAR/QSAR methods)
 RN 296761-71-2 HCAPLUS
 CN Benzenesulphonic acid, 3-(aminomethyl)-a-[(1R)-1-[[[3-(aminomethyl)[1,1'-biphenyl]-4-yl]carbonyl]amino]ethyl]-, methyl ester, (±R)- (SCI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN (Continued)
 AB The title compds. I [X = (un)substituted Ph, pyridyl, morpholino, etc.; Y = unsatd. group; R2 = absent, halo; p = 0-2; Z = absent, a bond, alkyl, etc.; L = C, N; R3 = absent, amino, hydroxy; R4 = halo, nitro, cyano, etc.; q = 0-2], useful for treating cancer, were prepared. Thus, reacting N-(2-aminophenyl)-4-iodobenzamide with allene and morpholine in the presence of K2CO3, tri-2-furylphosphine and tris(dibenzylideneacetone)dipalladium in MeCN afforded 91% II. Representative compds. I were tested against cancer cell lines (data given). The pharmaceutical composition comprising the compound I is disclosed.
 IT 871940-66-8
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of benzamide derivs. as inhibitors of histone deacetylase for treating cancer)
 RN 871940-66-8 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-[2-[4-[[[2-aminophenyl]amino]carbonyl]phenyl]-2-propenyl]- (9CI) (CA INDEX NAME)

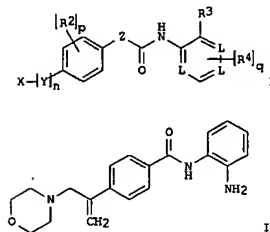


REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 2005:1329643 HCAPLUS
 DOCUMENT NUMBER: 144:69625
 TITLE: Preparation of benzamide derivatives as inhibitors of histone deacetylase
 INVENTOR(S): Grigg, Ronald; Cook, Andrew
 PATENT ASSIGNEE(S): University of Leeds, UK
 SOURCE: PCT Int. Appl., 84 pp.
 CODEN: PIXXD2
 LANGUAGE: Patent
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2005121073 | A1 | 20051222 | WO 2005-GB2234 | 20050607 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, GU, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |

PRIORITY APPLN. INFO.: GB 2004-12964 A 20040610
 OTHER SOURCE(S): MARPAT 144:69625 US 2004-578915P P 20040610
 GI



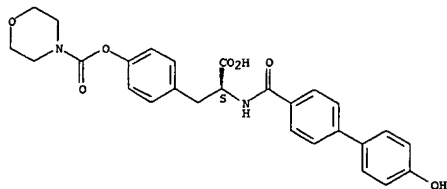
L4 ANSWER 9 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 2005:1262237 HCAPLUS
 DOCUMENT NUMBER: 144:35272
 TITLE: Augmenting B cell depletion by promoting intravascular access
 INVENTOR(S): Chan, Andrew C.; Gong, Qian; Martin, Flavius
 PATENT ASSIGNEE(S): Genentech, Inc., USA
 SOURCE: PCT Int. Appl., 165 pp.
 CODEN: PIXXD2
 LANGUAGE: Patent
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2005113003 | A2 | 20051201 | WO 2005-US12984 | 20050415 |
| WO 2005113003 | A3 | 20060316 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, GU, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |

US 2005276803 A1 20051215 US 2005-107028 20050415
 PRIORITY APPLN. INFO.: US 2004-563263P P 20040416
 OTHER SOURCE(S): MARPAT 144:35272

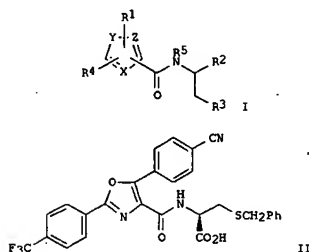
AB The present invention provides methods of augmenting B cell depletion by promoting intravascular access of B cell subsets sequestered in lymphoid tissues rendering the B cells sensitive to killing mediated by the B cell depleting agent. Certain B lymphocytes residing in tissues and organs, in particular those in the marginal zone of the spleen, are resistant to killing with anti-human CD20 antibody, even though these cells express sufficient levels of CD20 on their surface and are sat. with the administered anti-CD20 antibody. Promoting the egress of these B cells from the tissues in which they are resident into the vascular system and/or prolonging their presence in circulation renders them sensitive to killing by the anti-CD20 antibody. On approach to improving intravascular access of these sequestered B cells is to mobilize them into the circulation with antagonists of integrins that tether these B cells to certain zones in the lymphoid tissues. Thus, B cell mobilizing agents may comprise antibodies binding to the integrin α4 subunit (in α4β1 or α4β7) or αL subunit (αLβ2), or small mol. antagonists of α4 or αL. Depletion of the mobilized B cells is achieved using antagonists of B cell surface markers (CD20, CD22, CD52). Methods of treating B cell disorders by this approach are also provided, including B cell neoplasms and autoimmune diseases.
 IT 331470-94-1
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (integrin α4 antagonist; augmenting B cell depletion by promoting intravascular access)
 RN 331470-94-1 HCAPLUS
 CN L-Tyrosine, N-[(4'-hydroxy[1,1'-biphenyl]-4-yl)carbonyl]-, 4-(4-morpholinecarboxylate) (9CI) (CA INDEX NAME)

L4 ANSWER 9 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
Absolute stereochemistry.



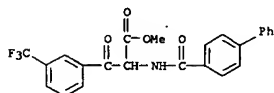
L4 ANSWER 10 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1259524 HCAPLUS
DOCUMENT NUMBER: 144:22910
TITLE: Preparation of azole carboxamides as inhibitors of bacterial type III protein secretion systems
INVENTOR(S): Li, Xiaobing; Murray, William V.; Macielag, Mark J.; Guan, Qunying
PATENT ASSIGNEE(S): Janssen Pharmaceutica, N.V., Belg.
SOURCE: PCT Int. Appl., 99 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2005113522 | A1 | 20051201 | WO 2005-US16105 | 20050506 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 2005272784 | A1 | 20051208 | US 2005-123977 | 20050506 |
| PRIORITY APPLN. INFO.: MARPAT 144:22910 | | | US 2004-568851P | P 20040507 |
| OTHER SOURCE(S): | | | | |



L4 ANSWER 10 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

- AB Title compds. represented by the formula I [wherein X = N; Y = O, S or (aryl)amino; Z = CH₃ or N; n = 0 or 1; R₁ = (un)substituted (hetero)aryl, arylalkynyl or heterocyclyl; R₂ = H or carboxy; R₃ = (halo)aryl, benzyloxy, benzylthio, benzylsulfinyl, benzylsulfonyl; R₄ = (un)substituted aryl; R₅ = H or alkyl; or an optical isomer, diastereomer or enantiomer thereof; or a pharmaceutically acceptable salt, hydrate or prodrug thereof] were prepared as inhibitors of bacterial type III protein secretion systems. For example, II was provided in a multi-step synthesis starting from the reaction of Me isocyanacetate with 4-cyanobenzoyl chloride. I were tested for inhibition of the type III protein secretion of the chimeric SopE'-Bla polypeptide by *S. enterica*, the SipB polypeptide by *S. enterica* and effectors from a *P. aeruginosa* system. Thus, I are useful for the treatment and prevention of bacterial infections, particularly Gram-neg. bacterial infections.
- IT 870280-32-3P, 2-[[[Biphenyl-4-yl]carbonyl]amino]-3-oxo-3-(3-trifluoromethylphenyl)propionic acid methyl ester
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of azole carboxamides as inhibitors of bacterial type III protein secretion systems)
- RN 870280-32-3 HCAPLUS
- CN Phenylalanine, N-[[[1,1'-biphenyl]-4-ylcarbonyl]-β-oxo-3-(trifluoromethyl)-, methyl ester (9CI) (CA INDEX NAME)



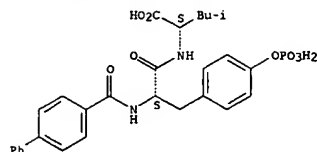
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 11 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1242309 HCAPLUS
DOCUMENT NUMBER: 144:580
TITLE: Combination therapies using Jak2/Stat3 signaling pathway inhibitors and PI3K/Akt signaling pathway inhibitors for cancer and proliferative angiopathies
INVENTOR(S): Yu, Hua E.; Jove, Richard; Cheng, Jin Q.; Sebti, Said; Niu, Guilian
PATENT ASSIGNEE(S): University of South Florida, USA
SOURCE: PCT Int. Appl., 80 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2005110477 | A2 | 20051124 | WO 2005-US12081 | 20050408 |
| WO 2005110477 | A3 | 20060309 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 2006030536 | A1 | 20060209 | US 2005-102911 | 20050408 |
| PRIORITY APPLN. INFO.: US 2004-560884P | | | P 20040409 | |
| AB Comps. and methods for treating cancer and proliferative angiopathies are provided. A composition can include an inhibitor of the Jak2/Stat3 signaling pathway and an inhibitor of the PI3K/Akt signaling pathway. In certain cases, the two inhibitors are capable of acting synergistically as compared to either inhibitor alone. | | | | |
| IT 725233-66-9, ISS 355 | | | | |
| RL: PAC (Pharmacological activity); BIOL (Biological study) (Jak2/Stat3 signaling pathway inhibitor combination with PI3K/Akt signaling pathway inhibitor for treatment of cancer and proliferative angiopathy) | | | | |
| RN 725233-66-9 HCAPLUS | | | | |
| CN L-Leucine, N-[[[1,1'-biphenyl]-4-ylcarbonyl]-O-phosphono-L-tyrosyl]- (9CI) (CA INDEX NAME) | | | | |

Absolute stereochemistry.

L4 ANSWER 11 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



L4 ANSWER 12 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1240988 HCAPLUS
 DOCUMENT NUMBER: 143:478213
 TITLE: Preparation of peptide keto-epoxides and related compounds for inhibition of enzymes
 INVENTOR(S): Smyth, Mark S.; Laidig, Guy J.; Borchardt, Ronald T.; Bunin, Barry A.; Crews, Craig M.; Musser, John H.; Shenk, Kevin D.; Radcliff, Peggy A.
 PATENT ASSIGNEE(S): Proteolix, Inc., USA
 SOURCE: PCT Int. Appl., 100 pp.
 CODEN: PIXX02
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

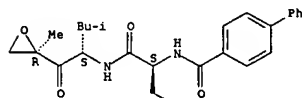
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 2005111008 | A2 | 20051124 | WO 2005-US16335 | 20050509 |
| WO 2005111008 | A3 | 20060316 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BV, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2005256324 A1 20051117 US 2005-131688 20050517 PRIORITY APPLN. INFO.: US 2004-569885P P 20040510 US 2004-610040P P 20040914 US 2004-634366P P 20041207 US 2004-572072P P 20040517 WO 2005-US16335 A2 20050509 | | | | |

OTHER SOURCE(S): MARPAT 143:478213
 AB The invention relates to peptide-based compounds. R⁵CH(R¹)CONHCH(R²)CONHCH(R³)CONHCH(R⁴)CO-X [X is 2-methyl-2-oxiranyl, 2-methyl-2-thiaziranyl or (N-alkyl)-2-methyl-2-aziridinyl; R¹-R⁴ are independently (un)substituted alkyl, hydroxyalkyl, alkoxyalkyl, aryl, aralkyl; R⁵ is a (functionalized) amino group, a chain of amino acids, a protective group, etc.] or their pharmaceutically-acceptable salts which efficiently and selectively inhibit specific activities of N-terminal nucleophile (Ntn) hydrolases. For example, the chymotrypsin-like activity of the 20S proteasome may be selectively inhibited with the inventive compounds. The peptide-based compounds are expected to display anti-inflammatory properties and inhibition of cell proliferation. Thus, Ac-L-hPhe-L-Leu-L-Ser-L-Leu-X [X = (2R)-2-methyloxiranyl, hPhe = homophenylalanyl] was prepared by sequential peptide coupling in solution and showed IC₅₀ values 20S CT-L < 50 nM and cell-based CT-L < 100 nM.
 IT 869804-82-OP
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

L4 ANSWER 12 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

(Uses)
 (prepn. of peptide keto-epoxides and related compds. for inhibition of enzymes)
 RN 869804-82-0 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-[(1S)-2-[(1S)-3-methyl-1-[(2R)-2-methyloxiranyl]carbonyl]butyl]amino]-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

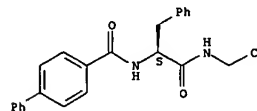
Absolute stereochemistry.



L4 ANSWER 13 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1169545 HCAPLUS
 DOCUMENT NUMBER: 144:88534
 TITLE: Interaction of Papain-like Cysteine Proteases with Dipeptide-Derived Nitriles
 AUTHOR(S): Loeser, Reik; Schilling, Klaus; Dimmig, Elke; Guetschow, Michael
 CORPORATE SOURCE: Pharmazeutisches Institut, Rheinische Friedrich-Wilhelms-Universität Bonn, Bonn, D-53115, Germany
 SOURCE: Journal of Medicinal Chemistry (2005), 48(24), 7688-7707
 CODEN: JMCMAR; ISSN: 0022-2623
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 144:88534
 AB A series of 44 dipeptide nitriles with various amino acids at the P2 position and glycine nitrile at position P1 were prepared and evaluated as inhibitors of cysteine proteinases. With respect to the important contribution of the P2-S2 interaction to the formation of enzyme-inhibitor complexes, it was focused to introduce structural diversity into the P2 side chain. Nonproteinogenic amino acids were introduced, and systematic fluorine, bromine, and Ph scans for phenylalanine in the P2 position were performed. Moreover, the N-terminal protection was varied. Kinetic investigations were carried out with cathepsin L, S, and K as well as papain. Changes in the backbone structure of the parent N-(tert-butoxycarbonyl)-phenylalanyl-glycine-nitrile (16), such as the introduction of an R-configured amino acid or an azamino acid into P2 as well as methylation of the P1 nitrogen, resulted in a drastic loss of affinity. Exemplarily, the cyano group of 16 was replaced by an aldehyde or Me ketone function. Structure-activity relationships were discussed with respect to the substrate specificity of the target enzymes.
 IT 872217-26-OP
 RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (preparation and biol. activity of dipeptide nitriles as inhibitors of cysteine proteases)
 RN 872217-26-0 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-[(1S)-2-[(cyanomethyl)amino]-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



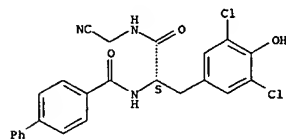
REFERENCE COUNT: 66 THERE ARE 66 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 14 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2005:1123751 HCAPLUS
 DOCUMENT NUMBER: 143:399840
 TITLE: Cathepsin B inhibitors for the treatment of diabetes and metabolic syndrome
 INVENTOR(S): Broder, Samuel E.; Rydzewski, Robert M.
 PATENT ASSIGNEE(S): Amys Pharmaceuticals, Inc., USA
 SOURCE: PCT Int. Appl., 56 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2005097103 | A2 | 20051020 | WO 2005-US11065 | 20050401 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |

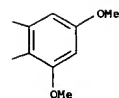
PRIORITY APPL. INFO.:
 OTHER SOURCE(S): MARPAT 143:399840
 AB The invention is directed to the treatment of e.g. Type II diabetes by administering a cathepsin B inhibitor(s).
 IT 867031-00-3
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (cathepsin B inhibitors for treatment of diabetes and metabolic syndrome)
 RN 867031-00-3 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-[(1S)-2-[(cyanomethyl)amino]-1-[(3,5-dichloro-4-hydroxyphenyl)methyl]-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

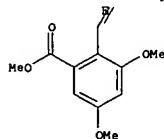


L4 ANSWER 15 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

PAGE 1-B



PAGE 2-A

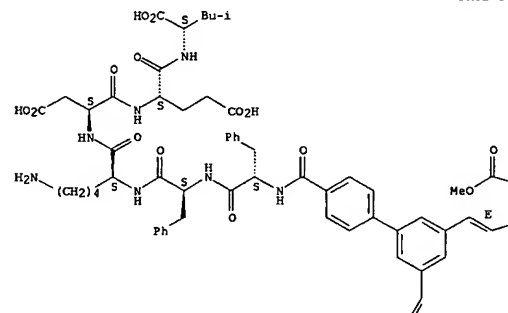


REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 15 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2005:1039130 HCAPLUS
 DOCUMENT NUMBER: 144:6550
 TITLE: Synthesis of stilbene carboxylic acids as scaffolds for calcium sensors
 AUTHOR(S): Behanna, Heather A.; Stupp, Samuel I.
 CORPORATE SOURCE: Department of Chemistry, Northwestern University, Evanston, IL, 60208, USA
 SOURCE: Chemical Communications (Cambridge, United Kingdom) (2005), (38), 4845-4847
 CODEN: CHCOFS; ISSN: 1359-7345
 PUBLISHER: Royal Society of Chemistry
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 144:6550
 AB The synthesis and characterization of calcium-binding stilbene carboxylic acids are described.
 IT 869959-69-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of stilbene carboxylic acids as scaffolds for calcium sensors)
 RN 869959-69-3 HCAPLUS
 CN L-Leucine, N-[[[3',5'-bis[(1E)-2-[2,4-dimethoxy-6-(methoxycarbonyl)phenyl]ethenyl][1,1'-biphenyl]-4-yl]carbonyl]-L-phenylalanyl-L-phenylalanyl-L-lysyl-L-α-aspartyl-L-α-glutamyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

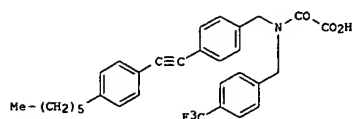
PAGE 1-A



L4 ANSWER 16 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2005:984019 HCAPLUS
 DOCUMENT NUMBER: 143:279395
 TITLE: Methylene amide derivatives for cardiovascular disorders
 INVENTOR(S): Hooft van Huijsduijnen, Rob; Richard, Vincent
 PATENT ASSIGNEE(S): Applied Research Systems Arco Holding N. V., Neth. Antilles
 SOURCE: PCT Int. Appl., 75 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

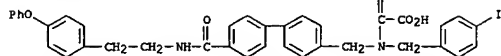
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2005082347 | A1 | 20050909 | WO 2005-EP50823 | 20050225 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |

PRIORITY APPL. INFO.:
 OTHER SOURCE(S): MARPAT 143:279395
 GI



AB The present invention is related to the use of substituted methylene amide derivs. for the treatment and/or prevention of cardiovascular disorders such as coronary obstruction and heart failure and/or prevention of endothelial dysfunction in heart failure. A methylene amide derivative I was able to acutely restore endothelial function in mice with chronic heart failure.
 IT 578023-25-3
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (methylene amide derivs. for cardiovascular disorders)
 RN 578023-25-3 HCAPLUS
 CN Acetic acid, [[[(4-iodophenyl)methyl][4'-[[[2-(4-phenoxyphenyl)ethyl]amino]carbonyl][1,1'-biphenyl]-4-yl]methyl]amino]oxo- (9CI) (CA INDEX NAME)

L4 ANSWER 16 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 17 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:511199 HCAPLUS
 DOCUMENT NUMBER: 143:145801
 TITLE: Ligand-based assessment of factor Xa binding site flexibility via elaborate pharmacophore exploration and genetic algorithm-based QSAR modeling
 AUTHOR(S): Taha, Mutasem O.; Qandil, Amjad M.; Zaki, Dhia D.; Aldamen, Murad A.
 CORPORATE SOURCE: Faculty of Pharmacy, Department of Pharmaceutical Sciences, University of Jordan, Amman, Jordan
 SOURCE: European Journal of Medicinal Chemistry (2005), 40(7), 701-727
 CODEN: EJMCAS; ISSN: 0223-5234
 PUBLISHER: Elsevier Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB The flexibility of activated factor X (fXa) binding site was assessed employing ligand-based pharmacophore modeling combined with genetic algorithm (GA)-based QSAR modeling. Four training subsets of wide structural diversity were selected from a total of 199 direct fXa inhibitors and were employed to generate different fXa pharmacophoric hypotheses using CATALYST software over two subsequent stages. In the first stage, high quality binding models (hypotheses) were identified. However, in the second stage, these models were refined by applying variable feature weight anal. to assess the relative significance of their features in the ligand-target affinity. The binding models were validated according to their coverage (capacity as a three-dimensional (3D) database search queries) and predictive potential as three-dimensional quant. structure-activity relationship (3D-QSAR) models. Subsequently, GA and multiple linear regression (MLR) anal. were employed to construct different QSAR models from high quality pharmacophores and explore the statistical significance of combination models in explaining bioactivity variations across 199 fXa inhibitors. Three orthogonal pharmacophoric models emerged in the optimal QSAR equation suggesting they represent three binding modes accessible to ligands in the binding pocket within fXa.

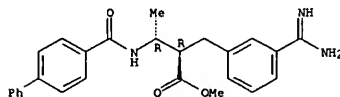
IT 193153-07-0
 RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(ligand-based assessment of factor Xa binding site flexibility via elaborate pharmacophore exploration and genetic algorithm-based QSAR modeling)

RN 193153-07-0 HCAPLUS

CN Benzenepropanoic acid, 3-(aminomethyl)- α -[(1R)-1-[(1,1'-biphenyl)-4-ylcarbonyl]amino]ethyl]-, methyl ester, (SR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 17 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

REFERENCE COUNT: 85 THERE ARE 85 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 18 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:474920 HCAPLUS
 DOCUMENT NUMBER: 143:19869
 TITLE: Peptidyl and nonpeptidyl compounds for derepression of IAP-inhibited caspase and therapeutic and drug screening uses
 INVENTOR(S): Reed, John C.; Houghten, Richard A.; Nefzi, Adel; Ostresh, John M.; Pinilla, Clemencia; Welsh, Kate
 PATENT ASSIGNEE(S): The Burnham Institute, USA; Torrey Pines Institute for Molecular Studies
 SOURCE: U.S. Pat. Appl. Publ., 182 pp., Cont.-in-part of U.S. Ser. No. 302,811.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|-------------|
| US 2005119176 | A1 | 20050602 | US 2003-748128 | 20031224 |
| US 2003180805 | A1 | 20030925 | US 2002-302811 | 20021121 |
| US 6911426 | B2 | 20050628 | | |
| US 2005159359 | A1 | 20050721 | US 2004-21517 | 20041223 |
| | | | US 2001-331957P | P 20011121 |
| | | | US 2002-302811 | A2 20021121 |

PRIORITY APPLN. INFO.:
 AB The invention provides isolated agents having a core peptidyl or nonpeptidyl (e.g., urea derivative, diketopiperazine derivative) structure, wherein the agent derepresses an IAP-inhibited caspase. The invention also provides a method of derepressing an IAP-inhibited caspase. The method consists of contacting an IAP-inhibited caspase with an effective amount of an agent to derepress an IAP-inhibited caspase. The methods of the invention can be used for promoting apoptosis in a cell and for reducing the severity of a pathol. (e.g., cancer) characterized by reduced levels of apoptosis. Methods for identifying agents that derepress an IAP-inhibited caspase are also provided.

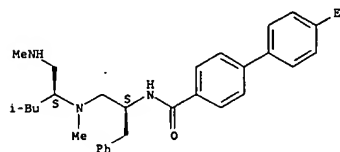
IT 852819-24-0
 RL: BSU (Biological study, unclassified); CST (Combinatorial study, unclassified); PAC (Pharmacological activity); BIOL (Biological study); CMBI (Combinatorial study)

(peptidyl and nonpeptidyl compds. for derepression of IAP-inhibited caspase and therapeutic and drug screening uses)

RN 852819-24-0 HCAPLUS

CN [(1,1'-Biphenyl)-4-carboxamide, 4'-ethyl-N-[(1S)-1-[(methyl[(1S)-3-methyl-1-[(methylamino)methyl]butyl]amino)methyl]-2-phenylethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 18 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

L4 ANSWER 19 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:141022 HCAPLUS
 DOCUMENT NUMBER: 142:240711
 TITLE: Preparation of aryl and heteroaryl amino acid derivatives for treating viral infections
 INVENTOR(S): Mjalli, Adnan M. M.; Andrews, Robert C.; Arimilli, Murty N.; Rao, Mohan; Guzel, Mustafa; Bondlela, Muralidhar
 PATENT ASSIGNEE(S): Transtech Pharma, Inc., USA
 SOURCE: PCT Int. Appl., 174 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 4
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2005014534 | A1 | 20050217 | WO 2004-US25478 | 20040806 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZH, ZW | | | |
| RW: | AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| US 2005049310 | A1 | 20050303 | US 2004-913882 | 20040806 |
| US 2005059713 | A1 | 20050317 | US 2004-913216 | 20040806 |
| PRIORITY APPLN. INFO.: | | | US 2003-493878P | P 20030808 |
| | | | US 2003-493879P | P 20030808 |
| | | | US 2003-493903P | P 20030808 |

OTHER SOURCE(S): MARPAT 142:240711

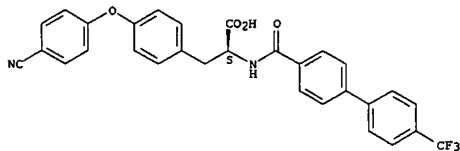
AB The invention relates to aryl and heteroaryl compds. Ar1-V-CH(X-Ar2) (CH2)0-2-G [I: the CH2 and CH2CH2 groups may be substituted by alkyl, aryl, arylalkyl, alkylaryl, alkylaryllalkyl, alkoxy, aryloxy or OH; G is H, alkyl, heteroaryl, aryl, heterocyclyl, CH:CHCO2R1, CO2R1, CH2OR1, CH2SR1, COR1, CONR1R2, CR1:NOR2, COCOR1, COCONR1R2, CH:CHNO2, CH:CHCN, COCO2R1 or an acid or ester isostere, where R1, R2 independently are H, alkyl, aryl, etc. or may combine to form a ring; V is (CH2)1-2-O- (CH2)0-2, (CH2)1-2-NR8- (CH2)0-2, (CH2)1-2-NR8, (CH2)0-2, CH:CH-R8 or a direct bond, where R8 is H, alkyl, aryl, etc. (the CH2 and CH2CH2 groups may be substituted); X is NR9, CONR9, NR9CO, NR9CONR10, O2CONR9, SO2NR9, NR9SO2 or NR9SO2NR10, where R9, R10 are independently H, alkyl, aryl, etc.; Ar1 is (un)substituted aryl, heteroaryl, fused cycloalkylaryl, fused cycloalkylheteroaryl, fused heterocyclylaryl or fused heterocyclylheteroaryl; Ar2 is (un)substituted aryl or heteroaryl and their pharmaceutical compns. Compds. I may be useful for treating viral infections including ortho pox viruses, either alone or in combination with other therapeutic agents. Thus, 3-biphenyl-4-yl-(2S)-[(3'-chloro-4'-fluoro-4-hydroxybiphenyl-3-carbonyl)amino]propionic acid Me ester, prepared by coupling reactions in the solid phase, inhibited viral replication with IC50 ≤ 100 μM.

IT 660826-29-9P

L4 ANSWER 19 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of aryl and heteroaryl amino acid derivs. for treating viral infections)
 RN 660826-29-9 HCAPLUS
 CN L-Tyrosine, O-(4-cyanophenyl)-N-[[4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 20 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:141021 HCAPLUS
 DOCUMENT NUMBER: 142:261788
 TITLE: Preparation of aryl and heteroaryl amino acid derivatives as antagonists of factor IX and/or factor XI
 INVENTOR(S): Mjalli, Adnan M. M.; Andrews, Robert C.; Guo, Xiao-Chuan; Christen, Daniel Peter; Gohmmukula, Devi Reddy; Huang, Guoxiang; Rothlein, Robert; Tyagi, Sameer; Yamasu, Tripura; Behme, Christopher
 PATENT ASSIGNEE(S): Transtech Pharma, Inc., USA
 SOURCE: PCT Int. Appl., 313 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 4
 PATENT INFORMATION:

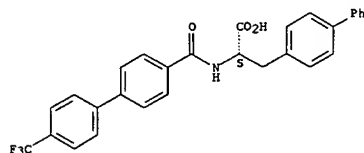
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2005014533 | A2 | 20050217 | WO 2004-US25463 | 20040806 |
| WO 2005014533 | A3 | 20050407 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZH, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| AU 2004263508 | A1 | 20050217 | AU 2004-263508 | 20040806 |
| CA 2531796 | AA | 20050217 | CA 2004-2531796 | 20040806 |
| US 2005049310 | A1 | 20050303 | US 2004-913882 | 20040806 |
| US 2005059713 | A1 | 20050317 | US 2004-913216 | 20040806 |
| EP 1660439 | A2 | 20060531 | EP 2004-780318 | 20040806 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR | | | |
| PRIORITY APPLN. INFO.: | | | US 2003-493878P | P 20030808 |
| | | | US 2003-493879P | P 20030808 |
| | | | US 2003-493903P | P 20030808 |
| | | | WO 2004-US25463 | W 20040806 |

OTHER SOURCE(S): MARPAT 142:261788

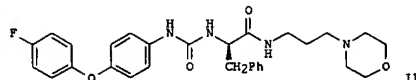
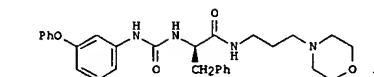
AB The invention relates to aryl and heteroaryl compds. Ar2-K (Ar2 is (un)substituted aryl, heteroaryl, fused cycloalkylaryl, fused cycloalkylheteroaryl, fused heterocyclylaryl or fused heterocyclylheteroaryl; K is a carbamoyl group of defined structure or Ar1-V-CH[(CH2)0-2-G]-X-, where G is H, CO2R1, CH2OR1, COR1, CR1:NOR2, CONR1R2, CONHNH2 or an acid or ester isostere and R1, R2 independently are H, alkyl, alkoxy, aryl, alkylamino, etc. or may combine to form a ring; V is (CH2)1-2-S- (CH2)0-2, (CH2)1-2-S-, S- (CH2)0-2 (or corresponding sulfonyl derivs.), (CH2)1-2-O- (CH2)0-2, (CH2)1-2-NR7- (CH2)0-2, (CH2)1-2-O or a direct bond, where R7 is H, alkyl, aryl, etc. (the CH2 or CH2CH2 groups may be substituted); X is NR8, CONR8, NR8CO, NR8CONR9, O2CONR9, SO2NR8 or NR8SO2NR9, where R8, R9 are independently H, alkyl, aryl, etc.; Ar1 is a group as defined for Ar2] and their pharmaceutical compns. Compds. Ar2-K may be antagonists or partial antagonist of factor IX and/or factor XI and thus may be useful for inhibiting the intrinsic pathway of blood coagulation. Applications include the management, treatment and/or

L4 ANSWER 20 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
control of diseases caused in part by the intrinsic clotting pathway.
Thus, (2S)-[5-bromo-2-(4-(trifluoromethylbenzyl)oxy)benzoylamino]-3-(2'-
phenoxybiphenyl-4-yl)propionic acid, prep. by amidation and O-benzoylation
reactions, inhibited factor IX or factor XI in the in vitro clotting assay
with IC50 < 30 micromolar.
IT 660826-14-2P
RI: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
(preparation of aryl and heteroaryl amino acid derivs. as antagonists of
factor IX and/or factor XI)
RN 660826-14-2 HCAPLUS
CN [1,1'-Biphenyl]-4-propanoic acid, α-[[[4'-(trifluoromethyl)[1,1'-
biphenyl]-4-yl]carbonyl]amino]-, (αS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 21 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:74663 HCAPLUS
DOCUMENT NUMBER: 142:298320
TITLE: Generation of a new class of hNK2 receptor ligands
using the "fragment approach"
AUTHOR(S): D'Andrea, Piero; Porcelloni, Marina; Madami, Andrea;
Patacchini, Riccardo; Altamura, Maria; Fattori,
Daniela
CORPORATE SOURCE: Menarini Ricerche S.p.A., Rome, 00040, Italy
SOURCE: Bioorganic & Medicinal Chemistry Letters (2005),
15(3), 585-588
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 142:298320
GI

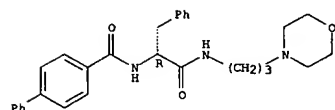


AB The so called "fragment approach" was applied in the search for new leads
as selective hNK2 antagonists. A first round of structural space
exploration through the use of bond rigidity as scaffold to support the
fragments, afforded I as 200 nM hNK2 ligand. Further refinement gave MEN
14933 (II) as a 16 nM hNK2 ligand, selective vs. hNK1, of a novel class.
Conformational anal. was used to study results and plan future work.

IT 847786-23-6P
RI: BSU (Biological study, unclassified); SPN (Synthetic preparation);
BIOL (Biological study); PREP (Preparation)
(solid phase peptide synthesis using fragment approach of
peptidomimetics and tachykinin receptor-binding structure-activity
relationship)
RN 847786-23-6 HCAPLUS
CN [1,1'-Biphenyl]-4-carboxamide, N-[(1R)-2-[[3-(4-morpholinyl)propyl]amino]-
2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 21 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

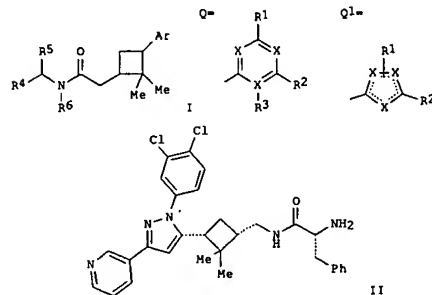


REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 22 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:15937 HCAPLUS
DOCUMENT NUMBER: 142:134917
TITLE: Preparation of 2,2-dimethylcyclobutane-containing
L-phenylalaninamide derivatives and
N-benzoyl-L-phenylalaninamide derivatives as
prenylation inhibitors and methods of their synthesis
and use
INVENTOR(S): Brown, Bradley B.; Rehder, Kenneth S.; Strachan,
Jon-paul; Eaves, Jeron H.; Lowden, Christopher T.
PATENT ASSIGNER(S): USA
SOURCE: U.S. Pat. Appl. Publ., 49 pp., Cont.-in-part of U.S.
Ser. No. 336,186.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------|------|----------|-----------------|-------------|
| US 2005004122 | A1 | 20050106 | US 2003-636312 | 20030806 |
| US 6664277 | B1 | 20031216 | US 2003-336186 | 20030103 |
| PRIORITY APPLN. INFO: | | | US 2002-219851 | A2 20020814 |
| | | | US 2003-336186 | A2 20030103 |
| | | | US 2003-454554P | P 20030314 |

OTHER SOURCE(S): MARPAT 142:134917
GI



AB The present invention is directed to compds. (I) [Ar = Q, Q1; X =
independently C, N, O or S; R1 = Ph, benzyl, Me, Et, n-Pr, pyrimidinyl,
3,4-dimethylphenyl, 3-chloropyridazinyl, etc.; R2 = Me, pyridinyl,
1-oxopyridinyl, 3-cyanophenyl, 3-aminophenyl, 3-aminophenyl,
3-dimethylaminophenyl, 2- or 4-methylthiadiazolyl, thiadiazolyl,

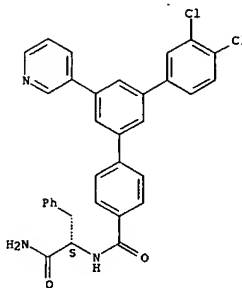
L4 ANSWER 22 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 5-methylisoxazole, 1,3-dimethylpyrazolyl, pyrazinyl, pyrimidinyl, etc.; R3 = absent, H, CH₂CH₂OH, CH₂CH₂OMe, CH₂CH₂NMe₂, CH₂CH₂NHMe, CH₂OH, (CH₂)₃OH, etc.; R4 = absent, H, NH₂, CONMe₂, CO₂H, cyano, CH₂OH, CONH₂, CSNH₂, CONHOH, C(NH)NH₂, CONHNH₂, CONHMe, etc.; R5 = absent, iso-Pr, benzyl, 4-trifluoromethylbenzyl, 4-cyanobenzyl, 4-benzoylbenzyl, 3-chlorobenzyl, pentafluorobenzyl, 3,4-dichlorobenzyl, 2-fluorobenzyl, 4-methoxybenzyl, etc.; R6 = H, Me, Et, n-Pr, iso-Pr, CH₂CO₂H, CH₂CO₂Et, benzyl, or CH₂-(2-methoxynaphthyl); or R5 and R6 together form Q2, Q3, or Q4 and pharmaceutically acceptable salts thereof and pharmaceutical compns. comprising same, and to methods for inhibiting protein prenylation in an organism using the same. There is also provided a method for inhibiting protein prenylation comprising contacting an isoprenoid transferase with a compd. of the formula I. These compds., e.g. (II), are useful in the treatment of diseases assocd. with prenylation of proteins, including cancer, restenosis, psoriasis, endometriosis, atherosclerosis, ischemia, myocardial ischemic disorders, elevated serum cholesterol levels, angiogenesis, viral infection, fungal infection, yeast infection, bacterial infection, protozoa infection and corneal neovascularization. An assay for inhibitory activity against GGPTase-I is described, which measures the transfer of isoprenoid from 3H-geranylgeranyl diphosphate (GGPP) into a Ras protein with a C-terminal leucine-for-serine substitution (no data).

IT 663181-23-5P
 RI: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of dimethylcyclobutane-containing L-phenylalaninamides and N-benzoyl-L-phenylalaninamides as protein prenylation inhibitors for treating diseases associated with prenylation of proteins)

RN 663181-23-5 HCAPLUS
 CN [1,1':3',1''-Terphenyl]-4-carboxamide, N-[(1S)-2-amino-2-oxo-1-(phenylmethyl)ethyl]-3'',4''-dichloro-5'-(3-pyridinyl)- (9CI) (CA INDEX NAME)

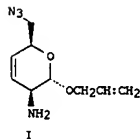
Absolute stereochemistry.

L4 ANSWER 22 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



L4 ANSWER 23 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:115593 HCAPLUS
 DOCUMENT NUMBER: 142:240700
 TITLE: The Overman rearrangement in carbohydrate chemistry: stereoselective synthesis of functionalized 3-amino-3,6-dihydro-2H-pyran and incorporation in peptide derivatives

AUTHOR(S): Montero, Ana; Mann, Enrique; Herradon, Bernardo
 CORPORATE SOURCE: C.S.I.C., Instituto de Química Orgánica General, Madrid, 28006, Spain
 SOURCE: Tetrahedron Letters (2005), 46(3), 401-405
 CODEN: TETLEA; ISSN: 0040-4039
 PUBLISHER: Elsevier B.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 142:240700
 GI



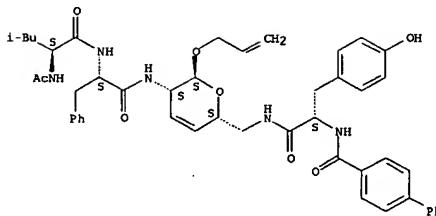
AB A stereocontrolled synthesis of unsatd. sugar I bearing two amino groups (one of them masked as an azide), using an Overman rearrangement as key step, is described. This scaffold is used to prepare two peptides having aromatic fragments, which have shown activity as calpain inhibitors.

IT 845512-76-7P
 RI: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (stereoselective synthesis of aminodihydropyran peptide derivs. as calpain inhibitors)

RN 845512-76-7 HCAPLUS
 CN α-D-threo-Hex-3-enopyranoside, 2-propenyl 2-[(N-acetyl-L-leucyl-L-phenylalanyl)amino]-6-[[[(2S)-2-[[[(1,1'-biphenyl]-4-ylcarbonyl)amino]-3-(4-hydroxyphenyl)-1-oxopropyl]amino]-2,3,4,6-tetraoxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

L4 ANSWER 23 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 24 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:996149 HCAPLUS

DOCUMENT NUMBER: 141:424430

TITLE: Preparation of phenyl substituted carboxylates, including amino acid derivatives, as inhibitors of protein tyrosine phosphatases for treatment of diabetes, cancer, and related conditions

INVENTOR(S): Whitehouse, Darren; Hu, Shaojing; Fang, Haiquan; Van Zandt, Michael

PATENT ASSIGNEE(S): The Institute of Pharmaceutical Discovery, LLC, USA

SOURCE: PCT Int. Appl., 121 pp.

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

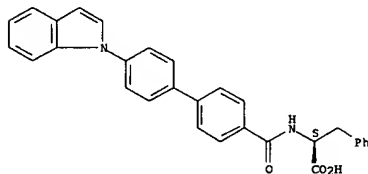
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|-------------------|-----------------|------------|
| WO 2004099170 | A2 | 20041118 | WO 2004-US13701 | 20040430 |
| WO 2004099170 | A3 | 20050915 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| AU 2004236248 | A1 | 20041118 | AU 2004-236248 | 20040430 |
| CA 2524235 | AA | 20041118 | CA 2004-2524235 | 20040430 |
| US 2005004369 | A1 | 20050106 | US 2004-835924 | 20040430 |
| EP 1620422 | A2 | 20060201 | EP 2004-751193 | 20040430 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR | | | |
| BR 2004009916 | A | 20060425 | BR 2004-9916 | 20040430 |
| NO 2005005129 | A | 20060123 | NO 2005-5129 | 20051102 |
| PRIORITY APPLN. INFO.: | | | US 2003-466868P | P 20030430 |
| | | | WO 2004-US13701 | W 20040430 |
| OTHER SOURCE(S): | | MARPAT 141:424430 | | |
| GI | | | | |

L4 ANSWER 24 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

(9CI) (CA INDEX NAME)

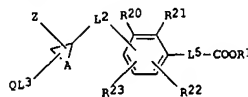
Absolute stereochemistry.



L4 ANSWER 25 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

L4 ANSWER 24 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

(Continued)



AB The invention relates to compds. I [wherein R1 = H, phenyl/alkyl, alkenyl; L2 = a bond, CONH and derivs., NHCO and derivs., etc.; L3 = absent, a bond, alkylene, alkenylene, phenylene, etc.; L5 = a bond, (un)substituted -O-alkylene, alkylene-O, alkylene-S-alkylene, etc.; R20, R21, R22, R23 = independently H, halo, alkyl, OH, alkoxy, NO2, NH2, CN, (un)substituted arylalkoxy, arylalkyl, etc.; A = (un)substituted hetero/aryl, heterocycloalkyl; Q = H, (un)substituted hetero/aryl, heterocycloalkyl, etc.; Z = absent, H, (un)substituted aryl, etc.] and their pharmaceutically acceptable salts which are useful in the treatment of metabolic disorders related to insulin resistance, leptin resistance, or hyperglycemia (no data). Compds. of the invention include inhibitors of protein tyrosine phosphatases, in particular protein tyrosine phosphatase-1B (PTP-1B), that are useful in the treatment of diabetes and other PTP mediated diseases, such as cancer, neurodegenerative diseases, and the like (no data). Also disclosed are pharmaceutical compns. comprising compds. of the invention and methods of treating the aforementioned conditions using such compds. For example, II was prepared in 3 steps by reacting 3-chloropropanoic acid Me ester with 4-bromobenzyl bromide, coupling with [4'-(Dibenzofuran-4-yl)phenyl]boronic acid, and demethylation. Preferred I exhibited IC50 ≤ 300 nM in an in vitro inhibitory activity test against recombinant human PTP1B with phosphotyrosyl dodecapeptide TRDI (P)YTD (P)Y(P)YRK.

IT 796034-03-2P, N-[[4'-(1H-Indol-1-yl)biphenyl-4-yl]carbonyl]-L-phenylalanine

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(PTP-1B inhibitor; preparation of Ph substituted carboxylates, including amino acid derivs., as PTP-1B inhibitors for treatment of diabetes, cancer, and related conditions)

RN 796034-03-2 HCAPLUS

CN L-Phenylalanine, N-[[4'-(1H-indol-1-yl)[1,1'-biphenyl]-4-yl]carbonyl]-

L4 ANSWER 25 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:996147 HCAPLUS

DOCUMENT NUMBER: 141:424429

TITLE: Preparation of substituted carboxylic acids, including amino acid derivatives, as inhibitors of protein tyrosine phosphatases for treatment of diabetes, cancer, and related conditions

INVENTOR(S): Van Zandt, Michael C.; Whitehouse, Darren; Combs, Kerry; Hu, Shaojing

PATENT ASSIGNEE(S): The Institute of Pharmaceutical Discovery, LLC, USA

SOURCE: PCT Int. Appl., 96 pp.

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

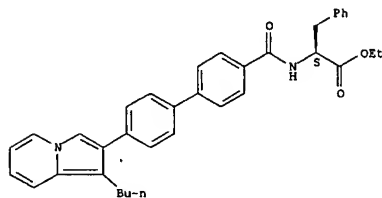
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|-------------------|-----------------|------------|
| WO 2004099168 | A2 | 20041118 | WO 2004-US11371 | 20040414 |
| WO 2004099168 | A3 | 20050224 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| AU 2004236173 | A1 | 20041118 | AU 2004-236173 | 20040414 |
| CA 2523714 | AA | 20041118 | CA 2004-2523714 | 20040414 |
| US 2004266788 | A1 | 20041230 | US 2004-823842 | 20040414 |
| EP 1620420 | A2 | 20060201 | EP 2004-760538 | 20040414 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR | | | |
| BR 2004009914 | A | 20060425 | BR 2004-9914 | 20040414 |
| NO 2005004957 | A | 20060123 | NO 2005-4957 | 20051025 |
| PRIORITY APPLN. INFO.: | | | US 2003-467057P | P 20030430 |
| | | | WO 2004-US11371 | W 20040414 |
| OTHER SOURCE(S): | | MARPAT 141:424429 | | |
| GI | | | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to compds. I [wherein X = (CH2)_n; n = 0-4; R1 = phenyl/alkyl, alkenyl; R2 = Ph, phenyl/alkyl, alkyl-COH2, hydroxyalkyl, etc.; R20, R21, R22, R23 = independently H, arylalkoxy, aryl/halo/alkyl, halo, OH and derivs., NO2, NH2, NH-aryl, wherein each of the above aryl groups are optionally substituted, etc.; L = SO2NH, NHSO2, SO2, NH, O, CONH, CO-alkyl, etc.; L3 = a bond, absent, CO, CONH, NHCO, etc.; A = (un)substituted aryl, selected from Ph, naphthyl, fluorenyl, or heteroaryl; Q = H, arylheteroaryl/heteroarylalkyl/heteroaryl/heteroaryl, wherein the aryl group = (un)substituted Ph, naphthyl, or fluorenyl] and their pharmaceutically acceptable salts which are useful in the treatment of metabolic disorders related to insulin resistance, or hyperglycemia (no

L4 ANSWER 25 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 data). Comps. of the invention include inhibitors of protein tyrosine phosphatases, in particular protein tyrosine phosphatase-1B (PTP-1B), that are useful in the treatment of diabetes and other PTP mediated diseases, such as cancer, neurodegenerative diseases, and the like (no data). Also disclosed are pharmaceutical compns. comprising compds. of the invention and methods of treating the aforementioned conditions using such compds. For example, II was prepd. in 5 steps from 2,4'-dibromoacetophenone, ester II, and benzyl bromide. Preferred I exhibited IC50 \leq 300 nM in an in vitro inhibitory activity test against recombinant human PTP1B with phosphotyrosyl dodecapeptide TRDI (P) VETD(P) V(P) YRK.
 IT 796033-61-9P, Ethyl N-[(4'-(1-butylindolizin-2-yl)biphenyl-4-yl)carbonyl]-L-phenylalaninate
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (PTP-1B inhibitor; preparation of substituted carboxylic acids as PTP-1B inhibitors for treatment of diabetes, cancer, and related conditions)
 RN 796033-61-9 HCAPLUS
 CN L-Phenylalanine, N-[(4'-(1-butyl-2-indolizinyl)[1,1'-biphenyl]-4-yl)carbonyl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

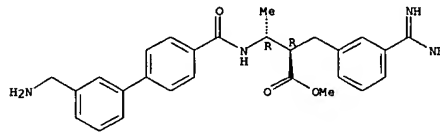


L4 ANSWER 26 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:832890 HCAPLUS
 DOCUMENT NUMBER: 142:19473
 TITLE: Comparing Ligand Interactions with Multiple Receptors via Serial Docking
 AUTHOR(S): Fernandes, Miguel X.; Kairys, Visvaldas; Gilson, Michael K.
 CORPORATE SOURCE: Center for Advanced Research in Biotechnology, U. Maryland Biotechnology Institute, Rockville, MD, 20850, USA
 SOURCE: Journal of Chemical Information and Computer Sciences (2004), 44(6), 1961-1970
 CODEN: JCISDH; ISSN: 0095-2338
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Standard uses of ligand-receptor docking typically focus on the association of

candidate ligands with a single targeted receptor, but actual applications increasingly require comparisons across multiple receptors. This study demonstrates that comparative docking to multiple receptors can help to select homol. models for virtual compound screening and to discover ligands that bind to one set of receptors but not to another, potentially similar, set. A serial docking algorithm is furthermore described that reduces the computational costs of such calcns. by testing compds. against a series of receptor structures and discarding a compound as soon as it fails to satisfy specified bind/no bind criteria for each receptor. The algorithm also realizes substantial efficiencies by taking advantage of the fact that a ligand typically binds in similar conformations to similar receptors. Thus, once detailed docking has been used to fit a ligand into the first of a series of similar receptors, much less extensive calcns. can be used for the remaining structures.

IT 296761-71-2, RPR 128515
 RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
 (Ligand interactions with multiple receptors via serial docking through electrostatic force and van der Waals forces)
 RN 296761-71-2 HCAPLUS
 CN Benzenepropanoic acid, 3-(aminoininomethyl)- α -[(1R)-1-[[[3'-(aminomethyl)[1,1'-biphenyl]-4-yl]carbonyl]amino]ethyl]-, methyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 26 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

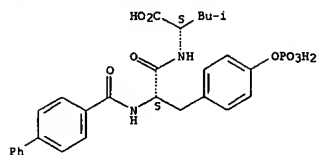
L4 ANSWER 27 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:718318 HCAPLUS
 DOCUMENT NUMBER: 141:236633
 TITLE: Peptidomimetic inhibitors of STAT activity and uses thereof
 INVENTOR(S): Tuckson, James; Jove, Richard; Sebt, Said M.; Hamilton, Andrew D.
 PATENT ASSIGNEE(S): University of South Florida, USA
 SOURCE: PCT Int. Appl., 47 pp.
 CODEN: PIXX02
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2004073650 | A2 | 20040902 | WO 2004-US5030 | 20040220 |
| WO 2004073650 | A3 | 20041021 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, RW, BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CN, GA, GN, GG, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2516685 | AA | 20040902 | CA 2004-2516685 | 20040220 |
| US 2005004009 | A1 | 20050106 | US 2004-784309 | 20040220 |
| EP 1597270 | A2 | 20051123 | EP-2004-713316 | 20040220 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| PRIORITY APPLN. INFO.: | | | US 2003-319960P | P 20030220 |
| | | | WO 2004-US5030 | W 20040220 |

OTHER SOURCE(S): MARPAT 141:236633
 AB The subject invention concerns compns. and methods for blocking cancer cell growth or proliferation and/or inducing cancer cell death. Compns. of the present invention are peptidomimetics that inhibit STAT function. Peptidomimetics of the invention include compds. of the formula RYⁿL (where Yⁿ represents phosphotyrosine), with the R group at the Y-position. Peptidomimetics of the invention disrupt Stat3 activation and function. Peptidomimetics of the invention significantly inhibit tumor cell growth and induce tumor cell death.
 IT 725233-66-9, ISS 355
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (antitumor peptidomimetic inhibitors of STAT activity)
 RN 725233-66-9 HCAPLUS
 CN L-Leucine, N-[(1,1'-biphenyl)-4-ylcarbonyl]-O-phosphono-L-tyrosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

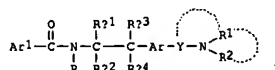
L4 ANSWER 27 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



L4 ANSWER 28 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:696336 HCAPLUS
 DOCUMENT NUMBER: 141:207231
 TITLE: Preparation of N-phenethylpiperidine-1-carboxamide, N-phenethylbenzamides, and N-phenethylbiphenyl-4-carboxamide derivatives as melanin-concentrating hormone antagonists
 INVENTOR(S): Ishihara, Yuji; Kamata, Makoto; Takekawa, Shiro
 PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
 SOURCE: PCT Int. Appl., 227 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|-------------------|-----------------|------------|
| WO 2004072018 | A1 | 20040826 | WO 2004-JP1467 | 20040212 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, RW, BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CH, GA, GN, CO, GW, HL, HR, NE, SN, TD, TG | | | |
| JP 2004262931 | A2 | 20040924 | JP 2004-34598 | 20040212 |
| EP 1593667 | A1 | 20051109 | EP 2004-710515 | 20040212 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | |
| US 2006128690 | A1 | 20060615 | US 2005-545120 | 20050810 |
| PRIORITY APPLN. INFO.: | | | JP 2003-34010 | A 20030212 |
| | | | WO 2004-JP1467 | W 20040212 |
| OTHER SOURCE(S): | | MARPAT 141:207231 | | |
| G1 | | | | |

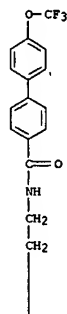


AB Amine compds. represented by the formula (I) or salts thereof [Ar1 = (un)substituted cyclic group; R = H, Cl-6 alkyl, halo-Cl-6 alkyl, each (un)substituted Ph or pyridyl; Ral-Ra4 = H, Cl-6 alkyl, halo-Cl-6 alkyl, halo, cyano, Cl-6 alkoxy-, halo-Cl-6 alkoxy, Cl-6 alkylthio, halo-Cl-6 alkylthio, NH2, mono- or di(Cl-6 alkyl)amino, CHO, Cl-6 alkylcarbonyl, halo-Cl-6 alkylcarbonyl, Cl-6 alkylsulfonyl, halo-Cl-6 alkylsulfonyl, each (un)substituted pyridyl or Ph; Ar = (un)substituted mono cyclic aromatic ring; Y = alkylene or haloalkylene; R1, R2 = H, Cl-6 alkyl or NR1R2 together forms (un)substituted N-containing heterocyclic ring; or NR1 and Y together forms (un)substituted N-containing heterocyclic ring and R2 = H or Cl-6 alkyl; provided that when NR1R2 together forms N- containing heterocyclic

L4 ANSWER 28 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 ring or R = Cl-4 alkyl, Ar1 = (un)substituted cyclic group] are prepd. These compds. have antagonistic activity against melanin-conc. hormone (MCH) and are useful as preventives/therapeutic agents for obesity, depression, or anxiety, or as antifeeding agents (appetite depressants). For example, N-[2-[4-[1-(1-azepanyl)ethyl]phenyl]ethyl]-4'-chloro-1,1'-biphenyl-4-carboxamide showed IC50 of 3 nM for inhibiting the binding of [36S]-guanosine 5'-(γ-thio)triphosphate to CHO cells expressing human SLC-1 receptor (MCH1). A tablet formulation contg. 4'-chloro-N-[2-[4-(1-pyrrolidinylmethyl)phenyl]propyl]-1,1'-biphenyl-4-carboxamide was prepd.

IT 742084-43-1P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (10)prepn. of N-phenethylpiperidine-1-carboxamide, N-phenethylbenzamides, and N-phenethylbiphenyl-4-carboxamide derivs. as melanin-concentrating hormone antagonists

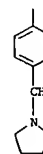
RN 742084-43-1 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-[2-[4-(1-pyrrolidinylmethyl)phenyl]ethyl]-4'--(trifluoromethoxy)- (9CI) (CA INDEX NAME)



PAGE 1-A

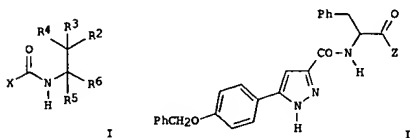
L4 ANSWER 28 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

PAGE 2-A



L4 ANSWER 29 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:67527 HCAPLUS
 DOCUMENT NUMBER: 141:207521
 TITLE: Preparation of bis(hetero)aryl carboxamides as PGI2 antagonists for the treatment of urological disorders.
 INVENTOR(S): Murata, Toshiki; Shintani, Takuya; Umeda, Masaomi; Lino, Takashi; Moriawaki, Toshiya
 PATENT ASSIGNEE(S): Bayer Healthcare A.-G., Germany
 SOURCE: PCT Int. Appl., 101 pp.
 CODEN: PIXX02
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|-------------------|-----------------|------------|
| WO 2004069805 | A1 | 20040819 | WO 2004-EP711 | 20040128 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | | |
| CA 2515235 | AA | 20040819 | CA 2004-2515235 | 20040128 |
| EP 1594846 | A1 | 20051116 | EP 2004-705785 | 20040128 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| JP 2006517211 | T2 | 20060720 | JP 2006-501629 | 20040128 |
| PRIORITY APPLN. INFO: | | | JP 2006-2607 | A 20030210 |
| | | | WO 2004-EP711 | W 20040128 |
| OTHER SOURCE(S): | | MARPAT 141:207521 | | |
| GI | | | | |



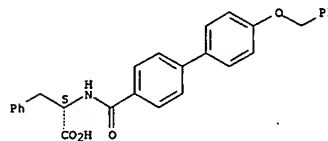
AB Title compds. I [X = -Ar1-Ar2-R1; Ar1, Ar2 = Ph, 5 or 6-membered heteroatom ring containing 1-4 heteroatoms, e.g., O, N, S; R1 = OR11, SR11, SOR11, etc.; R11 = (unsaturated alkyl with proviso); R2 = H, OH, halo, etc.; R3 = H, OH, halo, etc.; R4 = H, OH, halo, etc.; R5 = H, halo, CN, etc.; R6

L4 ANSWER 30 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:652533 HCAPLUS
 DOCUMENT NUMBER: 141:191073
 TITLE: Preparation of piperazines as melanocortin-specific agonists, antagonists, or mixed agonists and antagonists.
 INVENTOR(S): Sharma, Shubh D.; Shi, Yi-qun; Wu, Zhijun; Rajpurhit, Ramesh
 PATENT ASSIGNEE(S): Palatin Technologies, Inc., USA
 SOURCE: U.S. Pat. Appl. Publ., 70 pp., Cont.-in-part of Appl. No. PCT/US02/25574.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 8
 PATENT INFORMATION:

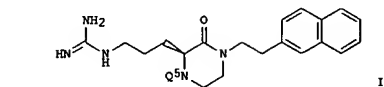
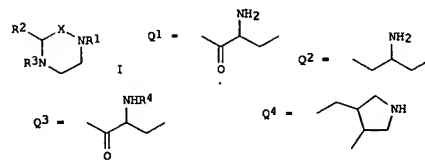
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|-------------------|-----------------|-------------|
| US 2004157264 | A1 | 20040812 | US 2004-762079 | 20040121 |
| WO 2003013571 | A1 | 20030220 | WO 2002-US25574 | 20020812 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| WO 2005102340 | A1 | 20051103 | WO 2004-US1462 | 20040121 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SZ, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZW, ZY | | | | |
| RW: BF, BG, CH, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 2005130988 | A1 | 20050616 | US 2005-36282 | 20050114 |
| US 2005124636 | A1 | 20050609 | US 2005-40838 | 20050121 |
| US 2005176728 | A1 | 20050811 | US 2005-99814 | 20050405 |
| PRIORITY APPLN. INFO: | | | US 2001-311404P | P 20010810 |
| | | | WO 2002-US25574 | A2 20020812 |
| | | | US 2003-474497P | P 20030530 |
| | | | US 2003-467442P | P 20030501 |
| | | | US 2004-536606P | P 20040114 |
| | | | US 2004-538100P | P 20040121 |
| | | | US 2004-761889 | A2 20040121 |
| | | | US 2004-762079 | A2 20040121 |
| | | | US 2004-546393P | P 20040219 |
| | | | US 2004-559741P | P 20040405 |
| | | | US 2004-563739P | P 20040419 |
| | | | US 2004-837519 | AB 20040430 |
| OTHER SOURCE(S): | | MARPAT 141:191073 | | |
| GI | | | | |

L4 ANSWER 29 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 = carboxy, tetrazolyl and their pharmaceutically acceptable salts were prepd. For example, ester hydrolysis of Me ester II (Z = OMe), e.g., prepd. from 4-hydroxyacetophenone in 5-steps, afforded propionic acid II (Z = OH) in 77% yield. In PGI2 receptor binding/cAMP assays, 48-examples of compds. I exhibited in vitro activity of < 1 μ M. Compds. I are claimed useful for the treatment of urol. disorders.
 IT 742057-84-7P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of bis(hetero)aryl carboxamides as PGI2 antagonists for the treatment of urol. disorders.)
 RN 742057-84-7 HCAPLUS
 CN L-Phenylalanine, N-[[4'-(phenylmethoxy)[1,1'-biphenyl]-4-yl]carbonyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



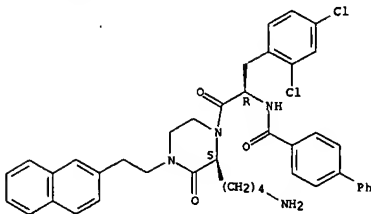
L4 ANSWER 30 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



AB Title compds. (I; R1 = L1J, H; R2 = (CH2)yW, J, L1J; R3 = L2Q; L1 = (CH2)y, O(CH2)y, NH(CH2)y, CO(CH2)y, CO2(CH2)y, CH2CONH; J = (substituted) aryl, carbocyclyl, carbobicycyl, heterobicycyl; W = heteroatom unit with ≥ 1 cationic center, hydrogen bond donor, or hydrogen bond acceptor wherein ≥ 1 atom = N; L2 = Q1, Q2, Q3, Q4, etc.; Q = (substituted) Ph, naphthyl; R4 = H, R5, RS6; R5 = amino acid residue, amine capping group; R6 = H, amine capping group; y = 1-6), were prepared. Thus, title compound (II; Q5 = 2,4-dichloro-D-phenylalanyl) (general preparation given) at 1 μ M gave 95% inhibition of melanocortin MC4-R.
 IT 497935-01-OP
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of piperazines as melanocortin-specific agonists, antagonists, or mixed agonists and antagonists)
 RN 497935-01-0 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-[(1R)-2-[(2S)-2-(4-aminobutyl)-4-[2-(2-naphthalenyl)ethyl]-3-oxo-1-piperazinyl]-1-[(2,4-dichlorophenyl)methyl]-2-oxoethyl]- (9CI) (CA INDEX NAME)

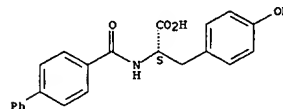
Absolute stereochemistry.

L4 ANSWER 30 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



L4 ANSWER 31 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:616828 HCAPLUS
 DOCUMENT NUMBER: 141:296279
 TITLE: Preparation of sugar amino acids by Claisen-Johnson rearrangement: Synthesis and incorporation into enkephalin analogs
 AUTHOR(S): Montero, Ana; Mann, Enrique; Herradon, Bernardo
 CORPORATE SOURCE: Instituto de Química Orgánica General, C.S.I.C., Madrid, 28006, Spain
 SOURCE: European Journal of Organic Chemistry (2004), (14), 3063-3073
 CODEN: EJOCHF; ISSN: 1434-193X
 PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 141:296279
 AB We have developed a convenient route for the synthesis of an unsatd. branched sugar bearing a carboxylic acid and an amino group (masked as an azide group) derived from 2-alkoxy-3,6-dihydro-2H-pyran by employing a totally stereoselective Claisen-Johnson rearrangement as the key step. Several Met- and Leu-enkephalin analogs with different substitution patterns at the N- and C-termini were prepared by incorporating this sugar amino acid (SAA) as a substitute for the central Gly-Gly fragment of the parent pentapeptides.
 IT 240482-28-4
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (synthesis of sugar amino acid derived from alkoxydihydropyran via asyn. Claisen-Johnson rearrangement and its incorporation into enkephalin analogs by peptide coupling)
 RN 240482-28-4 HCAPLUS
 CN L-Tyrosine, N-([1,1'-biphenyl]-4-ylcarbonyl)- (9CI) (CA INDEX NAME)
 Absolute stereochemistry.



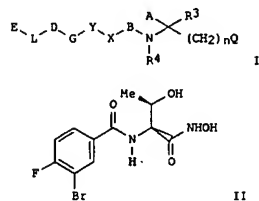
REFERENCE COUNT: 63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 32 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:610055 HCAPLUS
 DOCUMENT NUMBER: 141:157473
 TITLE: Preparation of amino acid derivatives as antibacterial agents
 INVENTOR(S): Anderson, Neils H.; Bowman, Jason; Erwin, Alice; Harwood, Eric; Kline, Toni; Mdluli, Khisimuzi; Ng, Simon; Pfister, Keith B.; Shawar, Ribhi; Wagman, Allan; Yabannavar, Asha
 PATENT ASSIGNEE(S): Chiron Corporation, USA
 SOURCE: PCT Int. Appl., 324 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

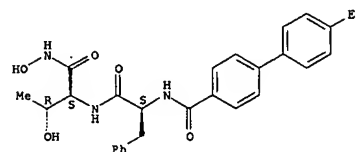
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|-------------|
| WO 2004062601 | A2 | 20040729 | WO 2004-US433 | 20040108 |
| WO 2004062601 | A3 | 20050421 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ | | | | |
| AU 2004204760 | A1 | 20040729 | AU 2004-204760 | 20040108 |
| CA 2512582 | AA | 20040729 | CA 2004-2512582 | 20040108 |
| US 2004229955 | A1 | 20041118 | US 2004-754928 | 20040108 |
| EP 1618087 | A2 | 20060125 | EP 2004-700887 | 20040108 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| CN 1777577 | A | 20060524 | CN 2004-80005935 | 20040108 |
| US 2006154988 | A1 | 20060713 | US 2005-187708 | 20050722 |
| PRIORITY APPLN. INFO.: | | | US 2003-438523P | P 20030108 |
| | | | US 2003-466974P | P 20030430 |
| | | | US 2003-520211P | P 20031113 |
| | | | US 2004-754928 | A1 20040108 |
| | | | WO 2004-US433 | W 20040108 |

OTHER SOURCE(S): MARPAT 141:157473
 GI



L4 ANSWER 32 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

AB Title compds. I [E = absent or H, (un)substituted-alkyl, -alkenyl, -aryl, etc.; L = absent or COMH, NHCO, (un)substituted alkyl, etc.; D = absent or (un)substituted-cycloalkyl, -aryl, -heterocyclyl or -heteroaryl; G = absent or alkene, alkyne, CO, etc.; Y = (un)substituted-cycloalkyl, -aryl, -heterocyclyl or -heteroaryl; X = CO, alkylcarbonyl, alkenylcarbonyl, alkynylcarbonyl, methylene, or when B is absent X and A together form heterocyclic ring; B = absent or substituted aminoalkylcarbonyl; R3 = H or (un)substituted alkyl, or R3 and A together form a cycloalkyl or heterocyclic ring; R4 = H or (un)substituted alkyl, or R4 and A together form a heterocyclic ring; n = 0-2; A = H, acetylene, alkyl, etc.; Q = absent or substituted amide, SH, SO2NH2, CO2H, etc.] are disclosed. As well as stereoisomers, pharmaceutically acceptable salts, esters, and prodrugs thereof; pharmaceutical compns. comprising such compds.; methods of treating bacterial infections by the administration of such compds.; and processes for the preparation of the compds. Thus, e.g., II was prepared via
 amidation of 3-bromo-4-fluorobenzoic acid with L-threonine Me ester hydrochloride followed by substitution with hydroxylamine hydrochloride. This invention pertains generally to treating infections caused by gram-neg. bacteria. More specifically, the invention described pertains to treating gram-neg. infections by inhibiting activity of UDP-3-O-(R-3-hydroxydecanoyl)-N-acetylglucosamine deacetylase (LpxC). Many of I displayed an IC50 value of less than 10 μM with respect to inhibition of LpxC.
 IT 728865-71-2P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (drug candidate; preparation of amino acid deriva. as antibacterial agents)
 RN 728865-71-2 HCAPLUS
 CN L-Threoninamide, N-[(4'-ethyl[1,1'-biphenyl]-4-yl)carbonyl]-L-phenylalanyl-N-hydroxy- (9CI) (CA INDEX NAME)
 Absolute stereochemistry.

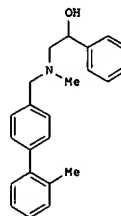


L4 ANSWER 33 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN

ACCESSION NUMBER: 2004:58954 HCAPLUS
 DOCUMENT NUMBER: 141:140172
 TITLE: Preparation of biaryl methylamines as CB1/CB2 receptor ligands and their use in the treatment of pain
 INVENTOR(S): Leung, Carmen; Tomaszewski, Miroslaw; Woo, Simon
 PATENT ASSIGNEE(S): AstraZeneca AB, Sued.
 SOURCE: PCT Int. Appl., 105 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|--|-----------------|------------|
| WO 2004060882 | A1 | 20040722 | WO 2003-SE2088 | 20031229 |
| WO 2004060882 | C1 | 20050324 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| AU 2003291609 | A1 | 20040729 | AU 2003-291609 | 20031229 |
| EP 1594856 | A1 | 20051116 | EP 2003-768494 | 20031229 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | |
| JP 2006514656 | T2 | 20060511 | JP 2004-564606 | 20031229 |
| US 2006052315 | A1 | 20060309 | US 2005-540998 | 20050628 |
| PRIORITY APPLN. INFO.: | | | SE 2003-10 | A 20030107 |
| | | | WO 2003-SE2088 | W 20031229 |
| OTHER SOURCE(S): | | CASREACT 141:140172; MARPAT 141:140172 | | |
| GI | | | | |

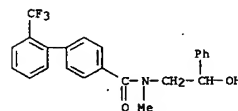
L4 ANSWER 33 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN (Continued)



II

AB Title compds. Ar2-Ar1-(X)n-NR1R2 [Ar1 = arylene, heteroarylene, etc.; Ar2 = aryl, heteroaryl, etc.; n = 0-1; X = divalent group; R1 = monovalent group containing one or more N, O, S, P; R2 = H, alkyl, acyl, etc.; I] are prepared. For instance, 2'-methyl-1,1'-biphenyl-4-carboxaldehyde is reacted with α -((methylamino)methyl)benzenemethanol (HOAc, NaBH(OAc)3) to give II. Compds. of the invention have K_i = 15-2800 nM for the CB2 receptor and K_i = 50-5000 nM for the CB1 receptor. I are useful in the management of pain.

IT 726135-20-2P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 use (preparation of biaryl methylamines as CB1/CB2 receptor ligands and their use in treatment of pain)
 RN 726135-20-2 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-(2-hydroxy-2-phenylethyl)-N-methyl-2'-(trifluoromethyl)- (9CI) (CA INDEX NAME)

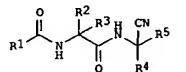


L4 ANSWER 34 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN

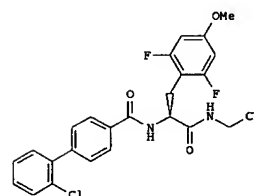
ACCESSION NUMBER: 2004:515539 HCAPLUS
 DOCUMENT NUMBER: 141:71829
 TITLE: Cyanomethyl derivatives as cysteine protease inhibitors
 INVENTOR(S): Graupe, Michael; Lau, Agnes J.; Link, John O.; Liu, Yang; Mossman, Craig J.; Patterson, John W.; Zipfel, Sheila M.
 PATENT ASSIGNEE(S): Amys Pharmaceuticals, Inc., USA
 SOURCE: PCT Int. Appl., 134 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|------------------|-----------------|------------|
| WO 2004052921 | A1 | 20040624 | WO 2003-US37979 | 20031126 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| CA 2506114 | AA | 20040624 | CA 2003-2506114 | 20031126 |
| AU 2003298740 | A1 | 20040630 | AU 2003-298740 | 20031126 |
| EP 1569954 | A1 | 20050907 | EP 2003-796499 | 20031126 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | |
| US 2006122184 | A1 | 20060608 | US 2005-536889 | 20051017 |
| PRIORITY APPLN. INFO.: | | | US 2002-431354P | P 20021205 |
| | | | WO 2003-US37979 | W 20031126 |
| OTHER SOURCE(S): | | MARPAT 141:71829 | | |
| GI | | | | |

L4 ANSWER 34 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN (Continued)



I



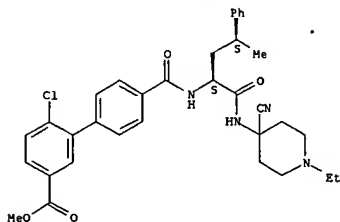
II

AB The dipeptide derivs. [I [R1 = substituted Ph, aryl, diaryl, heterodiallyl, furanyl, arylfuryl, pyrazolyl, etc.; R2 = H, (un)substituted cycloalkyl, indolyl, alkylindolyl, Me, Et, Pr, pentyl, etc.; R3 = H, or R2 and R3 together with the carbon atom to which they are attached formed (un)substituted cycloalkylene, cycloalkenylene or spirocycloalkylene; R4 = H; R5 = H, (un)substituted alkyl or heteroaryl, or R4 and R5 together with the carbon atom to which they are attached form cycloalkylene or heterocycloalkylene] were prepared as cysteine protease inhibitors, in particular, cathepsins B, K, L, F, and S, for treating diseases mediated by these proteases. Thus, compound II was prepared via peptide coupling of 2'-chlorobiphenyl-4-carboxylic acid with synthesized 2(S)-amino-N-cyanomethyl-3-(2,6-difluoro-4-methoxyphenyl)-propionamide. Compds. of the invention were tested by in vitro assays for protease activity and showed cathepsins B, K, L, F, and S inhibitory activity.

IT 710350-46-2P
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 use (preparation of dipeptide cyanomethyl derivs. as cysteine protease inhibitors)
 RN 710350-46-2 HCAPLUS
 CN [1,1'-Biphenyl]-3-carboxylic acid, 6-chloro-4'-[[[(1S,3S)-1-[(4-cyano-1-ethyl-4-piperidinyl)amino]carbonyl]-3-phenylbutyl]amino]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

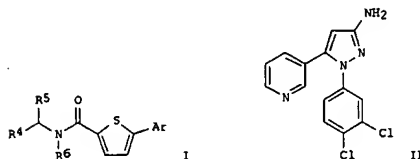
Absolute stereochemistry.

L4 ANSWER 34 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



L4 ANSWER 35 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:493566 HCAPLUS
 DOCUMENT NUMBER: 141:38610
 TITLE: Preparation of substituted thiophenes and related compounds as prenylation inhibitors
 INVENTOR(S): Li, Francine Feirong; Rehder, Kenneth S.; Campbell, Michael Gordon; Viscardi, Celeste Patrice; Strachan, Jon-paul; Guo, Zhengming
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 117 pp., Cont.-in-part of U.S. Ser. No. 336,285.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 6
 PATENT INFORMATION:

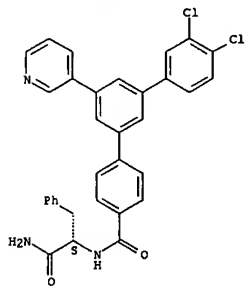
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|------------------|-----------------|-------------|
| US 2004116425 | A1 | 20040617 | US 2003-636327 | 20030806 |
| US 6649638 | B1 | 20031118 | US 2003-336285 | 20030103 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | US 2002-219628 | B2 20020814 |
| | | | US 2003-336285 | A2 20030103 |
| | | | US 2003-454554P | P 20030314 |
| OTHER SOURCE(S): | | MARPAT 141:38610 | | |
| GI | | | | |



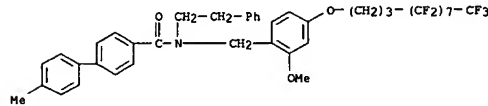
AB Title compds. I [Ar = heterocyclyl; R4 = absent, H, NH2, CONMe2, etc.; R5 = absent, i-Pr, benzyl, etc.; R6 = H, Me, Et, Fr, etc.] and related compds. are prepared For instance, 1-(3,4-dichlorophenyl)-5-(pyridin-3-yl)-1H-pyrazole-3-carboxylic acid Me ester•HCl (preparation given) is saponified (THF/H2O, NaOH) and converted to the Boc-protected pyrazole-3-amine (i. DMF, t-BuOH, DPPA, Et3N; ii. t-BuOH, reflux, 4 h) and deprotected to II. Compds. of the invention have inhibitory activity for GTPase I [no data]. I inhibit protein prenylation and are useful for treating cancer, restenosis, psoriasis, etc.
 IT 663181-23-5P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

L4 ANSWER 35 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 (Uses)
 (prepn. of substituted thiophenes and related compds. as prenylation inhibitors)
 RN 663181-23-5 HCAPLUS
 CN [1,1':3',1''-Terphenyl]-4-carboxamide, N-[(1S)-2-amino-2-oxo-1-(phenylmethyl)ethyl]-3'',4''-dichloro-5'-(3-pyridinyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 36 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:453614 HCAPLUS
 DOCUMENT NUMBER: 141:173950
 TITLE: A Fluorous-Tagged, Acid-Labile Protecting Group for the Synthesis of Carboxamides and Sulfonamides
 AUTHOR(S): Villard, Anne-Laure; Warrington, Brian H.; Ladiow, Mark
 CORPORATE SOURCE: University Chemical Laboratory, GlaxoSmithKline Cambridge Technology Centre, Cambridge, CB2 1EW, UK
 SOURCE: Journal of Combinatorial Chemistry (2004), 6(4), 611-622
 CODEN: JCCHEF; ISSN: 1520-4766
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 141:173950
 AB A new acid-labile, fluorous-tagged protecting group that facilitates the preparation of carboxamides and sulfonamides by parallel solution-phase synthesis is introduced. Its use is exemplified by the preparation of a 27-member library of biaryl sulfonamides and an 18-member library of biaryl carboxamides. Intermediates were purified by solid-phase extraction over reversed-phase fluorous silica gel to afford library members in high yields and purities (>95%) without the need for column chromatog. purification
 IT 734549-15-6P
 RL: CPN (Combinatorial preparation); CRT (Combinatorial reactant); RCT (Reactant); CMBI (Combinatorial study); PREP (Preparation); RACT (Reactant or reagent)
 (N-deprotection: parallel solution-phase synthesis of carboxamides and sulfonamides using a fluorous-tagged acid-labile protecting group)
 RN 734549-15-6 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-[[4-[(4,4,5,5,6,6,7,7,8,8,9,9,10,11,11,11-heptafluoroundecyl)oxy]-2-methoxyphenyl)methyl]-4'-methyl-N-(2-phenylethyl)- (9CI) (CA INDEX NAME)

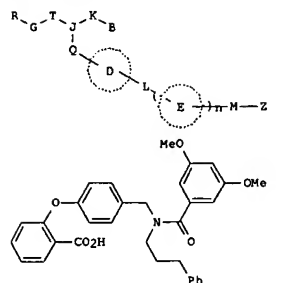


REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 37 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 2004:309296 HCAPLUS
 DOCUMENT NUMBER: 140:339072
 TITLE: Preparation of benzamide derivatives as LPA receptor antagonists
 INVENTOR(S): Terakado, Masahiko; Nakade, Shinji; Seko, Takuya; Takaoka, Yoshikazu
 PATENT ASSIGNEE(S): Ono Pharmaceutical Co., Ltd., Japan
 SOURCE: PCT Int. Appl., 304 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|-------------------|-----------------|------------|
| WO 2004031118 | A1 | 20040415 | WO 2003-JP6680 | 20030528 |
| W: AB, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CM, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LX, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2003241836 | A1 | 20040423 | AU 2003-241836 | 20030528 |
| EP 1553075 | A1 | 20050713 | EP 2003-733131 | 20030528 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| US 2006148830 | A1 | 20060706 | US 2005-530249 | 20050404 |
| PRIORITY APPLN. INFO.: | | | JP 2002-291137 | A 20021003 |
| | | | WO 2003-JP6680 | W 20030528 |
| OTHER SOURCE(S): | | MARPAT 140:339072 | | |
| GI | | | | |

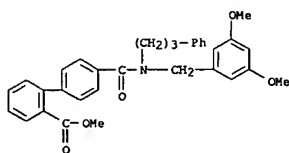
L4 ANSWER 37 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN (Continued)



AB The title compds. I [wherein R = (un)substituted aliphatic hydrocarbyl or cyclyl; G = a bond or a spacer; T = CH2 or a spacer; J = N or CH; B = (un)substituted aliphatic hydrocarbyl or cyclyl; K = a bond or a spacer; Q = a bond or a spacer; ring D = (un)substituted cyclic ring; L = a bond or a spacer; ring E = (un)substituted cyclic ring; n = 0 or 1; M = a bond or a spacer; Z = a acid group] or prodrugs, or salts thereof are prepared as lysophosphatidic acids (LPA) receptor antagonists. For example, the compound II was prepared in a multi-step synthesis. II showed inhibitory activity with IC50 of 0.095 μM against human EDG-2. I are useful for the treatment of urinary diseases, cancer-related diseases, proliferative diseases, inflammatory immune diseases, diseases caused by secretion failures, brain-related diseases, etc. (no data). Formulations containing I as an active ingredient were also described.

IT 679793-28-3P
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (drug candidate; preparation of benzamide derivs. as LPA receptor antagonists)
 RN 679793-28-3 HCAPLUS
 CN [1,1'-Biphenyl]-2-carboxylic acid, 4'-[[[(3,5-dimethoxyphenyl)methyl] (3-phenylpropyl)amino]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 37 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN (Continued)

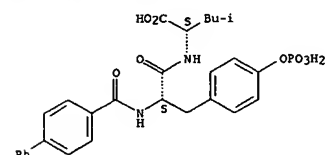


REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 38 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN

ACCESSION NUMBER: 2004:214410 HCAPLUS
 DOCUMENT NUMBER: 141:133678
 TITLE: Novel peptidomimetic inhibitors of signal transducer and activator of transcription 3 dimerization and biological activity
 AUTHOR(S): Turkson, James; Kim, Joon S.; Zhang, Shumin; Yuan, Jing; Huang, Mei; Glenn, Matthew; Haura, Eric; Sebti, Said; Hamilton, Andrew D.; Jove, Richard
 CORPORATE SOURCE: Molecular Oncology and Drug Discovery Programs, H. Lee Moffitt Cancer Center and Research Institute, Tampa, FL, USA
 SOURCE: Molecular Cancer Therapeutics (2004), 3(3), 261-269
 CODEN: MCTOCF; ISSN: 1535-7163
 PUBLISHER: American Association for Cancer Research
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The critical role of signal transducer and activator of transcription 3 (Stat3) in the growth and survival of human tumor cells identifies it as a promising target for cancer drug discovery. We previously identified a Stat3 SH2 domain-binding phosphopeptide, PY*¹LTKX, and its tripeptide derivs., PY*¹L and AY*¹L (where Y* represents phosphotyrosine), which inhibit Stat3 biochem. activity and biol. function. Here, we report novel peptidomimetic compds. based on PY*¹L (or AY*¹L) with substitution of the Y-1 residue by benzyl, pyridyl, or pyrazinyl derivs. that are selective and greater than 5-fold more potent in disrupting Stat3 activity in vitro than lead tripeptides. The biol. activities of these derivs. mirror that originally observed for peptides. In this context, the representative peptidomimetic ISS 610 with 4-cyanobenzoate substitution inhibits constitutive Stat3 activity in Src-transformed mouse fibroblasts and human breast and lung carcinoma cells. This effect is not evident with the non-phosphorylated counterpart, ISS 610NP, consistent with interaction of peptidomimetics with the SH2 domain of Stat3. Moreover, ISS 610 induces cell growth inhibition and apoptosis of Src-transformed fibroblasts that contain persistently active Stat3. We present the first report of a peptidomimetic approach to design of small-mol. inhibitors of Stat3 that are also among the first examples of disruptors of transcription factor dimerization with the potential for novel cancer therapy.
 IT 725233-66-9P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (novel peptidomimetic inhibitors of signal transducer and activator of transcription 3 dimerization and biol. activity)
 RN 725233-66-9 HCAPLUS
 CN L-Leucine, N-([1,1'-biphenyl]-4-ylcarbonyl)-O-phosphono-L-tycosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



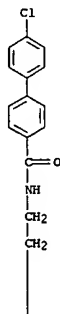
L4 ANSWER 38 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 39 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:198178 HCAPLUS
 DOCUMENT NUMBER: 140:235748
 TITLE: Preparation of arylquinoxalinones and related compounds as melanin concentrating hormone (MCH) antagonists.
 INVENTOR(S): Stenkamp, Dirk; Lehmann-Lintz, Thorsten; Mueller, Stephan; Rudolf, Klaus; Lustenberger, Philipp; Arndt, Kirsten; Lotz, Ralf; Wieland, Heiko; Lente, Martin; Boehringer Ingelheim International G.m.b.H., Germany;
 PATENT ASSIGNEE(S): Novo Nordisk A/S
 SOURCE: Ger. Offen., 132 pp.
 CODEN: GWXKX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

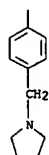
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|----------|
| DE 10238865 | A1 | 20040311 | DE 2002-10238865 | 20020824 |
| CA 2496563 | AA | 20040325 | CA 2003-2496563 | 20030816 |
| WO 2004024702 | A1 | 20040325 | WO 2003-EP9099 | 20030816 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG AU 2003258620 A1 20040430 AU 2003-258620 20030816 EP 1534689 A1 20050601 EP 2003-794886 20030816 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK BR 2003013790 A 20050712 BR 2003-13790 20030816 CN 1678591 A 20051005 CN 2003-820076 20030816 JP 2006507246 T2 20060302 JP 2004-535098 20030816 US 2004242572 A1 20041202 US 2003-647156 20030822 NO 2005000068 A 20050304 US 2005-68 20050106 PRIORITY APPLN. INFO.: DE 2002-10238865 A 20020824 US 2002-408224 P 20020904 WO 2003-EP9099 W 20030816 | | | | |

OTHER SOURCE(S): MARPAT 140:235748
 AB R1R2XYZNR3COAWKB [R1, R2 = H, (substituted) alkyl, cycloalkyl, Ph; R1R2 = (heteroatom-interrupted) (substituted) alkylene; R3 = H, alkyl, cycloalkyl, cycloalkylalkyl, alkoxyalkyl, aminoalkyl; X = bond, (heteroatom-interrupted) (substituted) alkylene; Z = (heteroatom-interrupted) (substituted) alkylene; A, Y = (hetero)cyclylene; B = (hetero)cyclyl; W = bond, O, alkylene, alkenylene, alkynylene, alkyleneoxy, imino, etc.; k = 0, 1; R1Y, R3Z, AR3 = atoms to form rings]. were prepared Thus, 4'-chloro-3-aminobiphenyl-4-carboxylic acid [2-(4-pyrrolidin-1-ylmethylphenyl)ethyl]amide (preparation given) was stirred with HCO2H for 3 h at room temperature and for 2 h at 100° to give 64.6%

L4 ANSWER 39 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 7-(4-chlorophenyl)-3-[2-(4-pyrrolidin-1-ylmethylphenyl)ethyl]-3H-quinazolin-4-one. Tested I showed MCH-1 binding activity with IC50 = 2.1-30.5 nM.
 IT 669001-86-9P
 RI: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (claimed compound: preparation of arylquinoxalinones and related compds. as melanin concentrating hormone (MCH) antagonists)
 RN 669001-86-9 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, 4'-chloro-N-[2-[4-(1-pyrrolidinylmethyl)phenyl]ethyl]- (9CI) (CA INDEX NAME)



PAGE 1-A

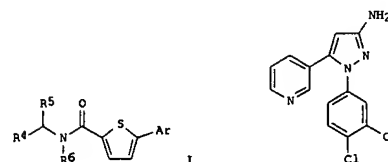


PAGE 2-A

L4 ANSWER 40 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:162671 HCAPLUS
 DOCUMENT NUMBER: 140:199323
 TITLE: Preparation of substituted thiophenes and related compounds as prenylation inhibitors
 INVENTOR(S): Li, Francine Feirong; Rehder, Kenneth S.; Campbell, Michael Gordon; Viscardi, Celeste Patrice; Strachan, Jon-Paul; Guo, Zhengming
 PATENT ASSIGNEE(S): PPD Discovery, Inc., USA
 SOURCE: PCT Int. Appl., 137 pp.
 CODEN: PIXK2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 6
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2004016592 | A1 | 20040226 | WO 2003-US24985 | 20030806 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 6649638 B1 20031118 US 2003-336285 20030103 AU 2003265395 A1 20040303 AU 2003-265395 20030806 EP 1534680 A1 20050601 EP 2003-788371 20030806 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK PRIORITY APPLN. INFO.: US 2002-219628 A 20020814 US 2003-336285 A 20030103 US 2003-454548 P 20030314 WO 2003-US24985 W 20030806 | | | | |

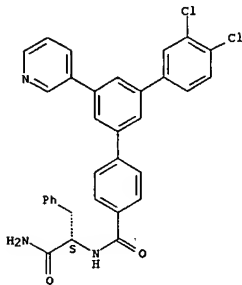
OTHER SOURCE(S): MARPAT 140:199323
 GI



AB Title compds. I [Ar = heterocyclyl; R4 = absent, H, NH2, CONMe2, etc.; R5 = absent, i-Pr, Benzyl, etc.; R6 = H, Me, Et, Pr, etc.] and related compds. are prepared For instance, 1-(3,4-dichlorophenyl)-5-(pyridin-3-yl)-

L4 ANSWER 40 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 1H-pyrazole-3-carboxylic acid Me ester-HCl (prepn. given) is aspond.
 (THF/H₂O, NaOH) and converted to the Boc-protected pyrazole-3-amine (i.
 DMF, t-BuOH, DPPA, Et₃N; ii. t-BuOH, reflux, 4 h) and deprotected to 11.
 Comps. of the invention have inhibitory activity for GTPase I [no data].
 I inhibit protein prenylation and are useful for treating cancer,
 restenosis, psoriasis, etc.
 IT 663181-23-5P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)
 (preparation of substituted thiophenes and related comps. as prenylation
 inhibitors)
 RN 663181-23-5 HCAPLUS
 CN [1,1':3',1''-Terphenyl]-4-carboxamide, N-[(15)-2-amino-2-oxo-1-
 (phenylmethyl)ethyl]-3'',4''-dichloro-5'-(3-pyridinyl)- (9CI) (CA INDEX
 NAME)

Absolute stereochemistry.



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

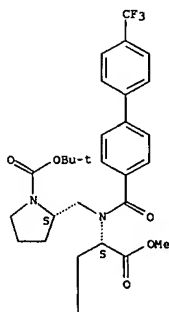
L4 ANSWER 41 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:143094 HCAPLUS
 DOCUMENT NUMBER: 140:199743
 TITLE: Preparation of substituted (2S)-(arylamino)-3-
 (biphenyl-4-yl)propionic acids as antagonists of
 factor IX for inhibiting the intrinsic pathway of
 blood coagulation
 INVENTOR(S): Mjalli, Adnan M. M.; Andrews, Robert C.; Guo,
 Xiao-chuan; Christen, Daniel Peter; Gohimmukula, Devi
 Reddy; Huang, Guoxiang; Rothlein, Robert; Tyagi,
 Sameer; Yamasu, Triptar; Behne, Christopher
 TRANSTECH PHARMS, INC., USA
 PATENT ASSIGNEE(S):
 SOURCE: PCT Int. Appl., 326 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2004014844 | A2 | 20040219 | WO 2003-US25045 | 20030808 |
| WO 2004014844 | A3 | 20050428 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SO, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| CA 2493008 | AA | 20040219 | CA 2003-2493008 | 20030808 |
| AU 2003265398 | A1 | 20040225 | AU 2003-265398 | 20030808 |
| US 2004110832 | A1 | 20040610 | US 2003-637900 | 20030808 |
| EP 1546089 | A2 | 20050629 | EP 2003-785150 | 20030808 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | |
| JP 2005535710 | T2 | 20051124 | JP 2004-527986 | 20030808 |
| PRIORITY APPLN. INFO.: | | | US 2002-402272P | P 20020809 |
| | | | WO 2003-US25045 | W 20030808 |

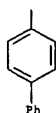
OTHER SOURCE(S): MARPAT 140:199743
 AB The title comps. Ar2XCH(VAr1)(CH2)cG [1; c = 0-2; G = H, CO2R1, CH2OR1, COR1, CR1; NOR2, an acid isostere (wherein R1, R2 = H, alkyl, aryl, etc.); V = (CH2)bo(CH2)a, (CH2)bNR7(CH2)a, (CH2)bo, (CH2)bNR7, (CH2)a, a bond (a = 0-2; b = 1-2; R7 = H, alkyl, aryl, etc.); X = NR8, COR8, NR8CO, etc. (R8 = H, alkyl, aryl, etc.); Ar1 = (un)substituted aryl, heteroaryl, cycloalkylaryl, etc.; Ar2 = (un)substituted aryl or heteroaryl], useful as antagonists, or more preferably, partial antagonists of factor IX and thus, may be used to inhibit the intrinsic pathway of blood coagulation, were prepared Thus, reacting Me 2-l-amino-3-biphenyl-4-yl-propionate with isoquinoline-3-carboxylic acid followed by hydrolysis afforded 81% 3-biphenyl-4-yl-(2S)-[(isoquinoline-3-carbonyl)amino]propionic acid. The comps. I inhibit factor IX with IC50 of less than 30 μM, and are useful in a variety of applications including the management, treatment and/or control of diseases caused in part by the intrinsic clotting

L4 ANSWER 41 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 pathway utilizing factor IX. Such diseases or disease states include
 stroke, myocardial infarction, aneurysm surgery, and deep vein thrombosis
 assocd. with surgical procedures, long periods of confinement, and
 acquired or inherited pro-coagulant states. The pharmaceutical compn.
 comprising the compd. I is claimed.
 IT 660829-69-6P
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
 preparation); THU (Therapeutic use); BIOL (Biological study); PREP
 (Preparation); RACT (Reactant or reagent); USES (Uses)
 (preparation of substituted (2S)-(arylamino)-3-(biphenyl-4-yl)propionic
 acids as antagonists of factor IX for inhibiting intrinsic pathway of
 blood coagulation)
 RN 660829-69-6 HCAPLUS
 CN 1-Pyrrolidinecarboxylic acid, 2-[[[(15)-1-[(1,1'-biphenyl)-4-ylmethyl]-2-
 methoxy-2-oxoethyl][[4'-(trifluoromethyl)(1,1'-biphenyl)-4-
 yl]carbonyl]amino]methyl]-, 1,1-dimethylethyl ester, (2S)- (9CI) (CA
 INDEX NAME)

Absolute stereochemistry.



PAGE 1-A



PAGE 2-A

L4 ANSWER 41 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

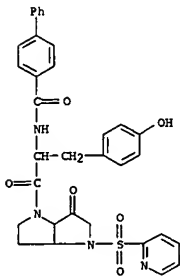
AB Title compds. I [wherein Z = CR₃A; P1 = C5R6G; P2 = O, CR7R8, NR9 = Y = CR10RI1CO, CR10RI1CS, CR10RI1SO, CR10RI1SO₂, etc.; X = CR16R17; W = O, S, CO, SO, SO₂, NR18 = Y = CO, CS, SO, SO₂, SO₂NH, OCO, NHCO, NHSO, NHSO₂, CONH, CONH, CR19R20, C=NCO2R19, C=NCNH2R19, Y = (un)substituted monocyclic or bicyclic ring which includes 0-4 heteroatoms; R3, R4, R7, R8, R9, R10, R11, R16, R17, R18, R19, R20 = independently H, (cyclo)alkyl, aralkyl; R5 and R6 = independently H, OH, SH, NH2, (cyclo)alkyl(ox), aryl[alkyl], aryl[alkyl]oxy, (cyclo)alkylalkoxy, aryl[alkyl]thio, (cyclo)alkylamino, aryl[alkyl]amino ester, amide, urea, carbamate, imine, hydrazide, azide, azido, hydrazides, solvates, complexes, and prodrugs] were prepared via solid phase and solution phase synthetic methods as inhibitors of cathepsin K and other cysteine proteases. For example, [3aS,6aR]-3-oxohexahydropyrrolo[3,2-b]pyrrole-1,4-dicarboxylic acid 1-tert-but ester 4-(9H-fluoren-9-ylmethyl) ester (several alternate multi-step solution phase preps. given) was converted to the building block-linker construct and loaded to the solid phase. Reaction with Fmoc-Leu-OH (HBVU, HOBT, NMM in DMF), followed by standard Fmoc deprotection, sequential rounds of coupling with 4-tert-butyl-L-proline (HBVU, HOBT, NMM in DMF) and benzoic anhydride (NMM in DMF), and washing with appropriate reagents provided II (R = Bu-t). The related compound II (R = 2-thienyl) inhibited human cathepsin K, crutispain, bovine cathepsin S, human cathepsin L, and cysteine protease B peptidase activity with KI values of <0.01 µM, >0.3 µM, >1 µM, >3 µM, and >0.2 µM, resp. Selected compds. of the invention suppressed bone resorption stimulated by human peripheral blood monocytes by ~70% at a concentration of 100 nM. Thus, I and their pharmaceutical compns. are useful

for the treatment of osteoporosis, Paget's disease, gingival diseases, such as gingivitis and periodontitis, hypercalcaemia of malignancy, metabolic bone disease, diseases involving matrix or cartilage degradation,

in particular osteoarthritis and rheumatoid arthritis, and neoplastic diseases (no data). The compds. are also useful for validating therapeutic target compds. (no data).

IT 649946-36-5P
RI: CFM (Combinatorial Preparation); PAC (Pharmacological activity); THU (Therapeutic use); BIOI (Biological study); CHBI (Combinatorial study); PRU (Preparation); USES (Uses)
(cysteine protease inhibitor; preparation of pyrrolo[3,2-b]pyrrolyl amino acid derivs. as cysteine protease inhibitors for treatment of bone diseases, arthritis, and other disorders)

L4 ANSWER 43 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 RN 648946-36-5 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-[2-[hexahydro-6-oxo-4-(2-pyridinylsulfonyl)pyrrolo[3,2-b]pyrrol-1(2H)-yl]-1-[(4-hydroxyphenyl)methyl]-2-oxoethyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

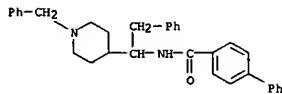
L4 ANSWER 44 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:20496 HCAPLUS
 DOCUMENT NUMBER: 140:77034
 TITLE: Preparation of substituted 3- and 4-(aminomethyl)piperidines for use as β -secretase inhibitors in the treatment of Alzheimer's disease
 INVENTOR(S): Boss, Christoph; Bur, Daniel; Fischli, Walter; Jenck, Francois; Weller, Thomas
 PATENT ASSIGNEE(S): Actelion Pharmaceuticals Ltd, Switz.
 SOURCE: PCT Int. Appl., 97 pp.
 CODEN: PIXAD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------|--|----------|------------------|------------|
| WO 2004002483 | A1 | 20040108 | WO 2003-EP6674 | 20030625 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| AU 2003238046 | A1 | 20040119 | AU 2003-238046 | 20030625 |
| PRIORITY APPL. INFO.: | | | WO 2002-EP7101 | A 20020627 |
| | | | WO 2003-EP6674 | W 20030625 |
| OTHER SOURCE(S): | | | MARPAT 140:77034 | |
| GI | | | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [wherein R1 = (cyclo)alkyl, (cyclo)alkenyl, alkynyl, heterocyclyl, (hetero)aryl; R2 and R3 = independently H, (cyclo)alkyl, (cyclo)alkenyl, alkynyl, heterocyclyl, (hetero)aryl; R4 = (cyclo)alkyl, (cyclo)alkenyl, alkynyl, heterocyclyl, (hetero)aryl; X = (CH2)nCH2(CH2)2, CO(CH2)p, CO(CH2)pNH(CH2)q, CO(CH2)fO(CH2)2p, COCH=CH, SO2(CH2)2p, SO2NH(CH2)2p, SO2CH=CH; Z = a bond, (CH2)nCH2(CH2)2, CH2CH=CH, (CH2)gNHCO, (CH2)gNHCO2, (CH2)gNHCONH, (CH2)gO(CH2)m; n and j = independently 0-2; m = 0-1; n, p, and q = independently 0-4; f = 1-4; g = 2-4; and pure enantiomers, mixts. of enantiomers, pure diastereomers, mixts. of diastereomers, diastereomeric racemates, mixts. of diastereomers racemates, meso-forms, cis- and trans-isomers, and pharmaceutically acceptable salts thereof] were prepared as β -secretase (BACE1) inhibitors. For example, reductive amination of 1-Boc-4-aminomethylpiperidine with 4-biphenylcarboxaldehyde, followed by acylation with 4-pentylbenzoyl chloride, deprotection, and reductive amination with phenylacetaldehyde gave II (no data for intermediates). Most of the prepared invention compds. were assayed for enzyme inhibition against the

L4 ANSWER 44 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 aspartic proteases human β -secretase (BACE1), plasmeprin II, plasmeprin IV, human cathepsin D, human cathepsin E, human renin, and HIV protease and were classified with activity of IC50 < 3 μ M, 3 μ M < IC50 < 7 μ M, or IC50 > 7 μ M. Thus, I and pharmaceutical compns. contg. one or more compds. I are useful for the treatment and prevention of Alzheimer's disease and CNS disorders assocd. with amyloid deposition in the brain (no data).
 IT 640770-11-2P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (B-secretase inhibitor; preparation of (aminomethyl)piperidines for use as β -secretase inhibitors in treatment of Alzheimer's disease and CNS disorders associated with amyloid deposition)
 RN 640770-11-2 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-[2-phenyl-1-[1-(phenylmethyl)-4-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

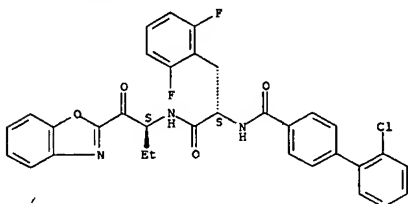
L4 ANSWER 45 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2003:931344 HCAPLUS
 DOCUMENT NUMBER: 140:5307
 TITLE: Preparation of peptides as cysteine protease inhibitors
 INVENTOR(S): Graupe, Michael; Lau, Agnes; Link, John O.; Liu, Yang; Mossman, Craig J.; Patterson, John W.; Zipfel, Sheila M.
 PATENT ASSIGNEE(S): Akys Pharmaceuticals, Inc., USA
 SOURCE: PCT Int. Appl., 95 pp.
 CODEN: PIXAD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------|--|----------|-----------------|------------|
| WO 2003097617 | A1 | 20031127 | WO 2003-US15486 | 20030514 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| CA 2484011 | AA | 20031127 | CA 2003-2484011 | 20030514 |
| AU 2003234630 | A1 | 20031202 | AU 2003-234630 | 20030514 |
| EP 1503997 | A1 | 20050209 | EP 2003-728973 | 20030514 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | |
| JP 2006506326 | TZ | 20060223 | JP 2004-505350 | 20030514 |
| US 2005288336 | A1 | 20051229 | US 2005-514804 | 20050803 |
| PRIORITY APPL. INFO.: | | | US 2002-38031P | P 20020514 |
| | | | US 2002-42237P | P 20021030 |
| | | | WO 2003-US15486 | W 20030514 |

OTHER SOURCE(S): MARPAT 140:5307
 AB The invention is directed to compds. R1CONHCR2R2aCONHCHR3CR4R5R6 [R1 = (hetero)aryl; R2 = H, (cyclo)alkyl, substituted methyl; R2a = H or R2R2aC = cyclohexyl or cycloheptyl; R3 = Et, Pr, Bu; R4 = benzoxazol-2-yl, oxazol[4,5-b]pyridin-2-yl, 2-pyridin-3-yl, 1,3,5-oxadiazol-5-yl, 2-pyridin-4-yl, 1,3,4-oxadiazol-5-yl, 2-ethyl[1,3,4]oxadiazol-5-yl, 2-phenyl[1,3,4]oxadiazol-5-yl, pyrazin-2-yl, pyrimidin-2-yl, pyridazin-3-yl, 3-phenyl[1,2,4]oxadiazol-5-yl, or 3-ethyl[1,2,4]oxadiazol-5-yl; R5 = H, OH, alkoxy; R6 = OH, alkoxy] that are inhibitors of cysteine protease, in particular cathepsins B, K, L, F, and S, and are therefore useful in treating diseases mediated by these proteases. Also disclosed are pharmaceutical compns. comprising these compds. and processes for preparing them. Thus, N-[1-(5-benzoxazol-2-ylcarbonylpropyl)-2-(S)-(2'-chlorobiphen-4-ylcarbonylamino)-3-(2,6-difluorophenyl)propionamide was prepared via amidation of 2-(2'-chlorobiphenyl-4-ylcarbonylamino)-3-(2,6-difluorophenyl)propionic acid with 2(S)-amino-1-benzoxazol-2-ylbutanol (preparation given), followed by Dess-Martin oxidation
 IT 627909-60-8P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of peptides as cysteine protease inhibitors)

L4 ANSWER 45 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 RN 627909-60-8 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-[(1S)-2-[(1S)-1-(2-benzoxazolylcarbonyl)propyl]amino]-1-[(2,6-difluorophenyl)methyl]-2-oxoethyl]-2'-chloro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

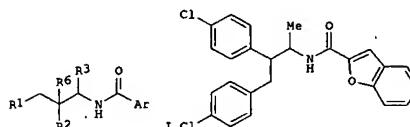


REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 46 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2003:837028 HCAPLUS
 DOCUMENT NUMBER: 139:337785
 TITLE: Preparation of substituted arylamides as cannabinoid-1 receptor antagonists and/or inverse agonists for use as psychotropic drugs
 INVENTOR(S): Haggmann, William K.; Lin, Linus S.; Shah, Shrenik K.
 PATENT ASSIGNEE(S): Merck & Co., Inc., USA
 SOURCE: PCT Int. Appl., 191 pp.
 CODEN: FIXX02
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------|--|----------|-----------------|------------|
| WO 2003087037 | A1 | 20031023 | WO 2003-US9800 | 20030401 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| CA 2480856 | AA | 20031023 | CA 2003-2480856 | 20030401 |
| AU 2003226149 | A1 | 20031027 | AU 2003-226149 | 20030401 |
| EP 1494997 | A1 | 20050112 | EP 2003-746565 | 20030401 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | |
| US 2005154202 | A1 | 20050714 | US 2003-509277 | 20030401 |
| JP 2005527586 | T2 | 20050915 | JP 2003-583993 | 20030401 |
| PRIORITY APPL. INFO.: | | | US 2002-370553P | P 20020405 |
| | | | WO 2003-US9800 | W 20030401 |

OTHER SOURCE(S): MARPAT 139:337785
 GI



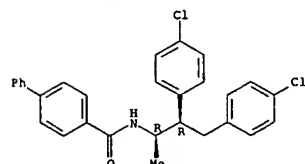
AB Title compds. I [wherein R1 = (un)substituted alkyl, (hetero)cycloalkyl, or (hetero)aryl; R2 = (un)substituted (hetero)cycloalkyl, (hetero)aryl, ORd, NRcRd, or CO2Rd; R3 = H or (un)substituted alkyl; R6 = H, halo, CN, NRcRd, or (un)substituted alkyl, alkenyl, or alkynyl; Ar = (un)substituted

L4 ANSWER 46 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 (hetero)aryl; R6 and R4 = independently H or (un)substituted alkyl, alkenyl, alkynyl, (hetero)cycloalkyl(alkyl), or (hetero)aryl(alkyl); or NRcRd = (un)substituted heterocyclyl; or two ORd groups together with the atoms to which they are attached = (un)substituted heterocyclyl; with provisos; and pharmaceutically acceptable salts thereof were prepd. by conventional and automated synthesis methods as antagonists and/or inverse agonists of the cannabinoid-1 (CB1) receptor (no data). For example, 2,3-bis(4-chlorophenyl)-1-methylpropylamine-HCl was acylated with 2-benzofurancarboxylic acid in the presence of PyBop and TEA in CH2Cl2 to give the desired amide II. I and their pharmaceutical compns. are useful as psychotropic drugs in the treatment of psychosis, memory deficits, cognitive disorders, migraine, neuropathy, neuroinflammatory disorders, including multiple sclerosis and Guillain-Barre syndrome, and the inflammatory sequelae of viral encephalitis, cerebral vascular accidents, and head trauma, anxiety disorders, stress, epilepsy, Parkinson's disease, movement disorders, and schizophrenia (no data). In addn., I and their pharmaceutical compns. are useful for the treatment of substance abuse disorders, the treatment of obesity or eating disorders, as well as the treatment of asthma, constipation, chronic intestinal pseudo-obstruction, and cirrhosis of the liver (no data).

IT 616243-52-8P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (CB1 receptor modulator; preparation of substituted arylamides as CB1 receptor antagonists and/or inverse agonists for use as psychotropic drugs)

RN 616243-52-8 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-[(1R,2R)-2,3-bis(4-chlorophenyl)-1-methylpropyl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



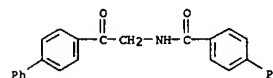
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 47 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2003:753358 HCAPLUS
 DOCUMENT NUMBER: 139:364543
 TITLE: Photolysis of α -azidoacetophenones: Direct Detection of Triplet Alkyl Nitrenes in Solution
 AUTHOR(S): Singh, Pradeep N. D.; Mandel, Sarah M.; Robinson, Rachel M.; Zhu, Zhendong; Franz, Roberto; Ault, Bruce S.; Gudmundsdottir, Anna D.
 CORPORATE SOURCE: Department of Chemistry, University of Cincinnati, Cincinnati, OH, 45221-0172, USA
 SOURCE: Journal of Organic Chemistry (2003), 68(21), 7951-7960
 CODEN: JOCEAH; ISSN: 0022-3263
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 139:364543

AB We report the first detection of triplet alkyl nitrenes in fluid solution by laser flash photolysis of α -azidoacetophenone derivs. p-RC6H4COCH2N3, 1. Azides 1 contain an intramol. triplet sensitizer, which ensures formation of the triplet alkyl nitrene by bypassing the singlet nitrene intermediate. At room temperature, azides 1 cleave to form benzoyl and Me azide radicals in competition with triplet energy transfer to form triplet alkyl nitrene. The major photoproduct p-RC6H4COCH2NHCOC6H4R-p, 3, arises from interception of the triplet alkyl nitrene with benzoyl radicals. The triplet alkyl nitrene intermediates are also trapped with mol. oxygen to yield the corresponding 2-nitrophenylethanone. Laser flash photolysis of 1 reveals that the triplet alkyl nitrenes have absorption around 300 nm. The triplet alkyl nitrenes were further characterized by obtaining their UV and IR spectra in argon matrices. ¹³C and ¹⁵N isotope labeling studies allowed us to characterize the C-N stretch of the nitrene intermediate at 1201 cm⁻¹.
 37061-76-0

IT RL: FMU (Formation, unclassified); FORM (Formation, nonpreparative) (direct detection of triplet alkyl nitrenes in solution by photolysis of α -azidoacetophenones)

RN 37061-76-0 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-(2-[1,1'-biphenyl]-4-yl-2-oxoethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 48 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:748776 HCAPLUS

DOCUMENT NUMBER: 140:88060

TITLE:

AUTHOR(S): Combination of vitamin D metabolites with selective inhibitors of vitamin D metabolism
Schuster, Inge; Egger, Helmut; Herzig, Gerda; Reddy, G. Satyanarayanan; Vorisek, Georg

CORPORATE SOURCE: Institute of Pharmaceutical Chemistry, University

SOURCE: Vienna, Vienna, 1090, Austria

Recent Results in Cancer Research (2003), 164 (Vitamin

D Analogs in Cancer Prevention and Therapy), 169-188

CODEN: RRCRBU; ISSN: 0080-0015

PUBLISHER: Springer-Verlag

DOCUMENT TYPE: Journal

LANGUAGE: English

AB 1 α ,25(OH) $_2$ D $_3$ exerts antiproliferative, differentiating effects on many cell types, including cancer tissues. In most of its target cells, levels of 1 α ,25(OH) $_2$ D $_3$ are regulated by local synthesis via CYP27B and metabolism via CYP24. Rapidly induced by vitamin D, CYP24 repeatedly hydroxylates the vitamin D side chain and ultimately terminates hormonal activity. Aiming at increased hormone levels, lifetime and function, numerous vitamin D analogs were synthesized with structural modifications, which impede oxidation of the vitamin D side chain. The authors' group followed a different strategy, namely, blocking 1,25(OH) $_2$ D $_3$ metabolism with inhibitors of CYP24. As appropriate inhibitors, the authors exploited compds. termed azoles, which directly bind to the heme iron of the CYPs via an azole nitrogen and to other parts of the substrate site. The authors synthesized some 400 azoles and tested their potential to selectively inhibit CYP24, but not hormone synthesis by the related CYP27B. Using primary human keratinocyte cultures as the source of CYP24 and CYP27, the authors discovered some 50 inhibitors of CYP24 with IC $_{50}$ values in the nanomole range and selectivities up to 60-fold. As the first representative of selective CYP24 inhibitors, VID400 underwent preclin. development. In human keratinocytes, VID400 stabilized levels of endogenously produced 1 α ,25(OH) $_2$ D $_3$, and thereby strongly amplified and prolonged expression of CYP24, a surrogate marker of hormonal function. In parallel, antiproliferative activity showed up at 100-fold or more lower concns. of 1 α ,25(OH) $_2$ D $_3$. This data suggests that CYP24 inhibitors could become attractive drugs in antiproliferative therapy, used as single entities to increase or extend endogenous hormone function or in combination with low doses of potent analogs. Moreover, the authors used selective inhibitors as valuable tools to (a) elucidate regulatory mechanisms of vitamin D synthesis and metabolism, (b) determine intrinsic activities of the otherwise highly, transient vitamin D metabolites and (c) model the active sites of CYP24 and CYP27B.

IT 174262-10-3, VID400

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(combination of vitamin D metabolites with selective inhibitors of

vitamin D metabolism)

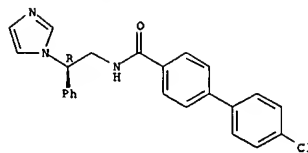
RN 174262-10-3 HCAPLUS

CN [1,1'-Biphenyl]-4-carboxamide, 4'-chloro-N-[(2R)-2-(1H-imidazol-1-yl)-2-

phenylethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

L4 ANSWER 48 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 49 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:644379 HCAPLUS

DOCUMENT NUMBER: 139:173816

TITLE:

INVENTOR(S): Pharmaceutical compositions containing (biphenylcarboxamido)isoindoline derivatives as ApoB secretion inhibitors and hypolipemics

Yamada, Harutami; Ando, Akira; Kawanishi, Riroyuki;

Nagata, Koichi; Yasuhara, Mikiko

PATENT ASSIGNEE(S): Tanabe Seiyaku Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 75 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

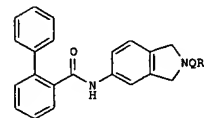
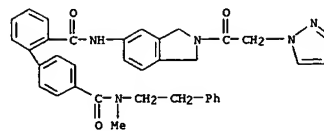
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| JP 2003231633 | A2 | 20030819 | JP 2002-29596 | 20020206 |
| PRIORITY APPLN. INFO.: | | | JP 2002-29596 | 20020206 |

OTHER SOURCE(S): MARPAT 139:173816

GI

L4 ANSWER 49 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



AB The derivs., useful for treatment of hyperlipemia, ischemic heart diseases, apoplexy, obesity, adiposis, constipation, etc., contain the title compds. I [A, B = (un)substituted benzene ring; Q = CO, CH $_2$; R = (un)substituted lower alkyl, lower alkenyl, carbamoyl, heterocyclyl, aryl] or their pharmacol. acceptable salts. 2-(2-Pyridyl)acetyl-5-[2-(4-trifluoromethylphenyl)benzoylamino]isoindoline hydrochloride (II; preparation given) inhibited ApoB secretion by HepG2 cells at IC $_{50}$ 2.1 nM. Oral administration of II to rats 1 h prior to loading of olive oil lowered plasma triglyceride concentration at ED $_{50}$ 0.59 mg/kg.

IT 400726-20-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of (biphenylcarboxamido)isoindoline derivs. as ApoB secretion inhibitors and hypolipemics)

RN 400726-20-7 HCAPLUS

CN [1,1'-Biphenyl]-2,4'-dicarboxamide, N2-[2,3-dihydro-2-(1H-pyrazol-1-yl)acetyl]-1H-isoindol-5-yl)-N4'-methyl-N4'-(2-phenylethyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 50 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN

ACCESSION NUMBER: 2003:610410 HCAPLUS

DOCUMENT NUMBER: 139:179889

TITLE: Methylene amides, particularly [(arylmethyl)amino](oxo)acetic acids, useful as modulators, and especially inhibitors, of protein tyrosine phosphatases (PTPs), and their preparation, uses, e.g., as antidiabetics, and pharmaceutical compositions.

INVENTOR(S): Swinnen, Dominique; Bombrun, Agnes; Gonzalez, Jerome; Gerber, Patrick; Fittet, Pierre-Andre

PATENT ASSIGNEE(S): Applied Research Systems ARS Holding N.V., Neth.

SOURCE: Antilles

PCT Int. Appl., 346 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2003064376 | A1 | 20030807 | WO 2003-EP808 | 20030127 |
| V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2472021 | AA | 20030807 | CA 2003-2472021 | 20030127 |
| EP 1470102 | A1 | 20041027 | EP 2003-734697 | 20030127 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| BR 2003007394 | A | 20041109 | BR 2003-7394 | 20030127 |
| JP 2005516061 | T2 | 20050602 | JP 2003-564000 | 20030127 |
| US 2005124656 | A1 | 20050609 | US 2003-501344 | 20030127 |
| CN 1633410 | A | 20050629 | CN 2003-807036 | 20030127 |
| ZA 2004005179 | A | 20050629 | ZA 2004-5179 | 20040629 |
| NO 2004003520 | A | 20041005 | NO 2004-3520 | 20040824 |
| PRIORITY APPLN. INFO.: | | | EP 2002-100078 | A 20020129 |
| | | | EP 2002-100410 | A 20020425 |
| | | | WO 2003-EP808 | W 20030127 |

OTHER SOURCE(S):

MARPAT 139:179889

GI

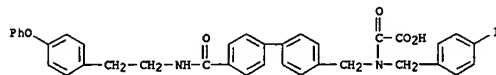
L4 ANSWER 50 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN (Continued)

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; prepn. of [(arylmethyl)amino](oxo)acetic acids as PTP inhibitors for antidiabetics)

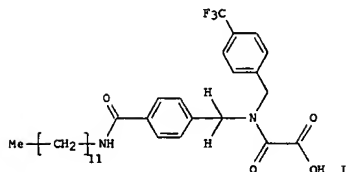
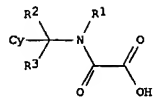
RN 578023-25-3 HCAPLUS

CN Acetic acid, [[[(4-iodophenyl)methyl][[4'-[[[2-(4-phenoxyphenyl)ethyl]amino]carbonyl][1,1'-biphenyl]-4-yl]methyl]amino]oxo-(9CI) (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 50 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN (Continued)



AB Title compds. I [wherein R1 = alkyl, alkenyl, alkynyl, aryl, heteroaryl, (3-8-membered)-cycloalkyl, heterocycloalkyl, (alkyl)aryl, (alkyl)heteroaryl, (alkenyl)aryl, heteroaryl, (alkynyl)aryl, heteroaryl; R2, R3 = independently H or alkyl; Cy = aryl, heteroaryl, cycloalkyl, heterocycloalkyl; with the proviso that four compds. are excluded: their geometrical isomers, optically active forms as enantiomers, diastereomers and racemates, and pharmaceutically acceptable salts and active derivs.] were prepared as inhibitors of protein tyrosine phosphatases (PTPs), in particular PTP1B. Examples include over 400 invention compds., five pharmaceutical formulations, and two biol. assays. For example, II was prepared in 4 steps by amidation of 4-formylbenzoic acid with dodecylamine in THF in the presence of 4-methylmorpholine and iso-Bu chloroformate for 3 h at room temperature, reductive amination with

4-trifluoromethylbenzylamine

in DCE in the presence of NaBH(OAc)3, TBA-acylation with chlorooxoacetic acid Et ester in THF, and base-catalyzed hydrolysis of the ester. II exhibited an IC50 value of 2.224 µM for inhibition of PTP1B, 1.40 µM for GLEPP-1, 2.40 µM for SHP-1, and 2.70 µM for SHP-2 in an in vitro assay. In an in vivo postprandial glycemia model in db/db mice, II, at 20-200 mg/kg orally, decreased blood glucose level by 17% at 20 mg/kg, by 42% at 100 mg/kg, and by 48% at 200 mg/kg, with decreases in serum insulin levels of -21, 66%, and 89%, resp. Thus, I and their formulations are useful for the treatment and/or prevention of metabolic disorders mediated by insulin resistance or hyperglycemia, comprising diabetes type I and/or II, inadequate glucose tolerance, insulin resistance, hyperlipidemia, hypertriglyceridemia, hypercholesterolemia, obesity, polycystic ovary syndrome (PCOS).

IT 578023-25-3P, [(4-Iodobenzyl)][[4'-[[[2-(4-phenoxyphenyl)ethyl]amino]carbonyl]-1,1'-biphenyl-4-yl]methyl]amino]glyoxylic acid

L4 ANSWER 51 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN

ACCESSION NUMBER: 2003:556869 HCAPLUS

DOCUMENT NUMBER: 140:163223

TITLE: Recycling solid supports - A head-to-tail linker

AUTHOR(S): Vitre, Cecile; Freebairn, Keith; Anson, Mike; Bradley, Mark

CORPORATE SOURCE: Department of Chemistry, University of Southampton,

Highfield, Southampton, UK

SOURCE: Molecular Diversity (2003), 6(1), 27-31

CODEN: MODIF4; ISSN: 1381-1991

PUBLISHER: Kluwer Academic Publishers

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 140:163223

AB The concept of a 'head-to-tail linker' designed to allow the regeneration and reuse of a variety of solid supports is introduced. The synthesis of this linker, its coupling to various solid supports, its application in a number of standard solid phase reactions and resin regeneration are presented.

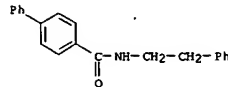
IT 38925-75-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

(linker-incorporated intermediate; incorporation of head-to-tail linker in solid-state supports for synthesis and catalysts)

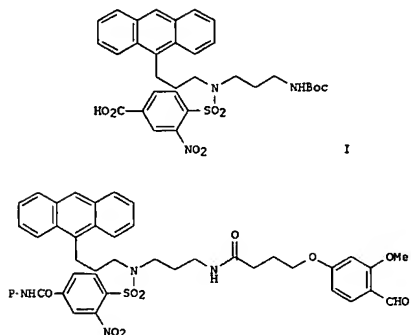
RN 38925-75-6 HCAPLUS

CN [1,1'-Biphenyl]-4-carboxamide, N-(2-phenylethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 52 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2003:44237 HCAPLUS
 DOCUMENT NUMBER: 139:164602
 TITLE: Convenient Preparation and Use of a New Analytical Construct for the Analysis and Development of Solid-Phase Chemistries
 AUTHOR(S): Andrews, Stephen P.; Ladow, Mark
 CORPORATE SOURCE: GlaxoSmithKline Cambridge Technology Center, University Chemical Laboratory, Cambridge, CB2 1EW, UK
 SOURCE: Journal of Organic Chemistry (2003), 68(14), 5525-5533
 CODEN: JOCEAH; ISSN: 0022-3263
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 139:164602
 GI



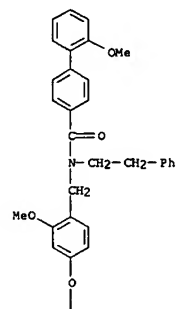
AB An expedient and scalable synthesis of a versatile new anal. construct intermediate I is described. The utility of the intermediate I is exemplified by the preparation of the construct resin II [P = polymer support] incorporating an acid-labile linker which is used to conveniently develop optimized conditions leading to the preparation of a small array of R1NHCOCH4R2-4 [R1 = 4-MeOC6H4CH2, Me2CHCH2, PhCH2CH2; R2 = 2-thienyl, 3-benzofuranyl, 2-MeOC6H4]. The optimized conditions are shown to work equally well on both the construct resin II and the corresponding base resin P-NHCO(CH2)3OC6H3(OMe)CHO-3,4.

IT 575434-49-ODP, polymer-supported
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

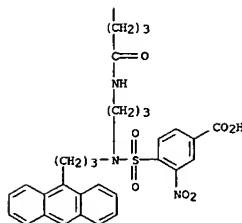
L4 ANSWER 52 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 52 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 (Reactant or reagent)
 (an anthracenylpropyl(aminopropylsulfamoyl)nitrobenzoic acid linker for solid-phase synthesis)
 RN 575434-49-0 HCAPLUS
 CN Benzoic acid, 4-[[[3-(9-anthracenyl)propyl]{3-[[4-[3-methoxy-4-[[[2'-methoxy[1,1'-biphenyl]-4-yl]carbonyl](2-phenylethyl)amino]methyl]phenoxy]-1-oxobutyl]amino]propyl]amino]sulfonyl]-3-nitro- (9CI) [CA INDEX NAME]

PAGE 1-A



PAGE 2-A

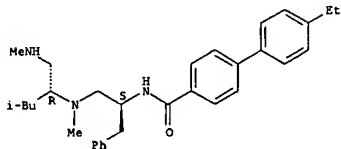


L4 ANSWER 53 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2003:434582 HCAPLUS
 DOCUMENT NUMBER: 139:30774
 TITLE: Methods and compositions using peptidyl and nonpeptidyl compounds for derepression of IAP-inhibited caspase, therapeutic use, and methods for identification of agents
 INVENTOR(S): Reed, John C.; Houghten, Richard A.; Nefzi, Adel; Ostresh, John M.; Pinilla, Clemencia; Welsh, Kate
 PATENT ASSIGNEE(S): The Burnham Institute, USA; Torrey Pines Institute for Molecular Studies
 SOURCE: PCT Int. Appl., 182 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 2003045974 | A2 | 20030605 | WO 2002-US37577 | 20021121 |
| WO 2003045974 | A3 | 20040219 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2467892 | AA | 20030605 | CA 2002-2467892 | 20021121 |
| AU 2002359457 | A1 | 20030610 | AU 2002-359457 | 20021121 |
| AU 2002359457 | A2 | 20030610 | | |
| EP 1465649 | A2 | 20041013 | EP 2002-793997 | 20021121 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK | | | | |
| JP 2005510569 | T2 | 20050421 | JP 2003-547423 | 20021121 |
| CN 1615148 | A | 20050511 | CN 2002-827412 | 20021121 |
| PRIORITY APPLN. INFO.: US 2001-331957P P 20011121 | | | | |
| WO 2002-US37577 W 20021121 | | | | |
| AB The invention provides isolated agents having a core peptidyl or nonpeptidyl (e.g. urea derivative, dikecopiperazine derivative) structure, wherein the agent derepresses an IAP-inhibited caspase. The invention also provides a method of derepressing an IAP-inhibited caspase. The method consists of contacting an IAP-inhibited caspase with an effective amount of an agent to derepress an IAP-inhibited caspase. The methods of the invention can be used for promoting apoptosis in a cell and for reducing the severity of a pathol. (e.g. cancer) characterized by reduced levels of apoptosis. Methods for identifying agents that derepress an IAP-inhibited caspase are also provided. | | | | |
| IT RL: CST (Combinatorial study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial study); USES (Uses) (peptidyl and nonpeptidyl compds. for derepression of IAP-inhibited caspase, therapeutic use, and methods for identification of agents) | | | | |
| RN 537051-00-6 HCAPLUS | | | | |
| CN [1,1'-Biphenyl]-4-carboxamide, 4'-ethyl-N-[(1S)-1-[[methyl[(1R)-3-methyl-1- | | | | |

L4 ANSWER 53 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 [(methylamino)methyl]butyl]amino]methyl]-2-phenylethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 54 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2003:434360 HCAPLUS

DOCUMENT NUMBER: 139:22211

TITLE: Aminoalkylimidazole derivatives for use as CYP24 inhibitors

INVENTOR(S): Tazi-Ahnini, Rachid; Ward, Simon; Cork, Michael; Duff, Gordon; Harrity, Joe; Bavi, Claes

PATENT ASSIGNEE(S): Molecular Skincare Limited, UK

SOURCE: PCT Int. Appl., 38 pp.

COOEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

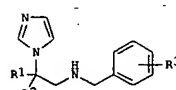
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2003045381 | A1 | 20030605 | WO 2002-GB5329 | 20021127 |
| V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, HT, HR, NE, SN, TD, TG | | | | |
| AU 2002343103 | A1 | 20030610 | AU 2002-343103 | 20021127 |
| PRIORITY APPLN. INFO.: GB 2001-28415 A 20011127 | | | | |
| WO 2002-GB5329 W 20021127 | | | | |

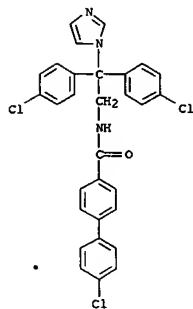
OTHER SOURCE(S): MARPAT 139:22211

GI



AB Aminoalkylimidazoles I [R1 (un)substituted Ph, quinoline, isoquinoline, anthracene; R2 = H, (un)substituted Ph; R3 = halogen, hydrocarbyl, (un)substituted Ph, N-acylpiperazinyl; X = CO, SO2; when X = CO and R1, R3 = (un)substituted Ph, R2 = H; when X = CO and R2, R3 = (un)substituted Ph, R1 = H] were prepared for use as CYP24 inhibitors (no data). Thus, 2-phenylaziridine was treated with 4-ClCH2COCl, followed by imidazole to give I [X = CO, R1 = Ph, R2 = H, R3 = 4-ClCH2].
 IT 116901-71-4P
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of aminoalkylimidazole derivs. for use as CYP24 inhibitors)
 RN 116901-71-4 HCAPLUS

L4 ANSWER 54 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 CN [1,1'-Biphenyl]-4-carboxamide, N-[2,2-bis(4-chlorophenyl)-2-(1H-imidazol-1-yl)ethyl]-4'-chloro- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 55 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:356419 HCAPLUS

DOCUMENT NUMBER: 138:368770

TITLE: Preparation of pyridinylethylamines and amides as anticancer drugs

INVENTOR(S): Menon, Sanjay R.; Lu, Yingchun; Sakamuri, Sukumar;

Chen, Quin-Zene; Khazak, Vladimir; Agarwal, Seema

Morphochem Aktiengesellschaft fuer Kombinatorische

Chemie, Germany

SOURCE: PCT Int. Appl., 66 pp.

COOEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2003037865 | A1 | 20030508 | WO 2002-EP12222 | 20021031 |
| V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2468761 | AA | 20030508 | CA 2002-2468761 | 20021031 |
| EP 1442018 | A1 | 20040804 | EP 2002-787539 | 20021031 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK | | | | |
| US 2005228017 | A1 | 20051013 | US 2005-497449 | 20050330 |
| PRIORITY APPLN. INFO.: US 2001-335300 P 20011031 | | | | |
| WO 2002-EP12222 W 20021031 | | | | |

OTHER SOURCE(S): MARPAT 138:368770

AB (R3Y) (R1X)NUR2 [n = 0-5; X, Y = CH2, CO, SO2, CONH; R1 = (substituted) aryl, aralkyl, heteroaryl, heteroarylalkyl; R2 = (substituted) heteroalkyl, aryl, aralkyl, heteroaryl, heteroarylalkyl, cycloalkyl, heterocycloalkyl, heteroalkylcycloalkyl; R3 = (substituted) alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, alkylcycloalkyl, heterocycloalkyl, heteroalkylcycloalkyl, aryl, heteroaryl, heteroarylalkyl, aralkyl], were prepared. Thus, N-(4-benzyloxy-3-methoxybenzyl)-N-(2-pyridin-2-ylethyl)amine (preparation given) in ClCH2CH2Cl

was treated with polymer-supported morpholine and 2-chlorobenzoyl chloride followed by stirring for 24 h. Polymer-supported isocyanate, polymer-supported tris(2-aminoethyl)amine, and ClCH2CH2Cl were added followed by stirring for 24 h to give 84% N-(4-benzyloxy-3-methoxybenzyl)-N-(2-pyridin-2-ylethyl)-2-chlorobenzamide. Title compds. showed IC50's of 5-60 µM in secondary luciferase assays in NIH3T3, CHO, or HEK293 cells.

IT 521311-04-6

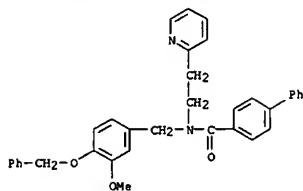
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation of pyridinylethylamines and amides as anticancer drugs)

RN 521311-04-6 HCAPLUS

CN [1,1'-Biphenyl]-4-carboxamide, N-[[3-methoxy-4-(phenylmethoxy)phenyl]methyl]-N-[2-(2-pyridinyl)ethyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 55 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN (Continued)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 56 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN

ACCESSION NUMBER: 2003:319711 HCAPLUS
DOCUMENT NUMBER: 138:338153
TITLE: Preparation of 2'-methyl-5'-(1,3,4-oxadiazol-2-yl)-1,1'-biphenyl-4-carboxamides as p38 kinase inhibitors
INVENTOR(S): Angell, Richard Martyn; Bamfborough, Paul; Cockerill, George Stuart; Walker, Ann Louise
PATENT ASSIGNEE(S): Glaxo Group Limited, UK
SOURCE: PCT Int. Appl., 61 pp.
DOCUMENT TYPE: CODEN: PIXXD2
LANGUAGE: Patent
FAMILY ACC. NUM. COUNT: English
PATENT INFORMATION: 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|-------------------|-----------------|------------|
| WO 2003032986 | A1 | 20030424 | WO 2002-EP11569 | 20021016 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1435949 | A1 | 20040714 | EP 2002-777313 | 20021016 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK | | | | |
| JP 2005507910 | T2 | 20050324 | JP 2003-535789 | 20021016 |
| US 2004266839 | A1 | 20041230 | US 2004-492713 | 20040415 |
| PRIORITY APPL. INFO.: | | | GB 2001-24936 | A 20011017 |
| OTHER SOURCE(S): | | MARPAT 138:338153 | WO 2002-EP11569 | W 20021016 |
| GI | | | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I: R1 = (un)substituted Ph; R2 = H, alkyl, (CH2)pcycloalkyl; R3 = H (wherein R4 = H, alkyl); U = Me, halo; X, Y = H, Me, halo; m = 0-4; n = 0-2; p = 0-2], useful as pharmaceuticals, particularly as p38 kinase inhibitors, were prepared E.g., 6-step synthesis of the carboxamide III, starting from 3-bromo-4-methylbenzoic acid, was given.

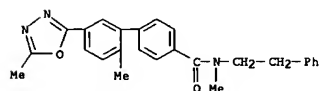
IT S15152-86-OP
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 2'-methyl-5'-(1,3,4-oxadiazol-2-yl)-1,1'-biphenyl-4-carboxamides as p38 kinase inhibitors)

RN S15152-86-0 HCAPLUS

CN [1,1'-Biphenyl]-4-carboxamide, N,2'-dimethyl-5'-(5-methyl-1,3,4-oxadiazol-

L4 ANSWER 56 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN (Continued)

2-yl)-N-(2-phenylethyl)- (9CI) (CA INDEX NAME)

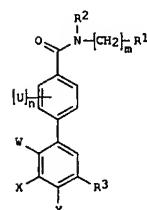


REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

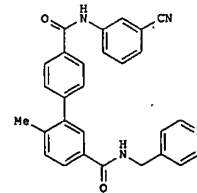
L4 ANSWER 57 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN

ACCESSION NUMBER: 2003:319700 HCAPLUS
DOCUMENT NUMBER: 138:337839
TITLE: Preparation of 5'-carbamoyl-2'-methyl-1,1'-biphenyl-4-carboxamides as p38 kinase inhibitors
INVENTOR(S): Angell, Richard Martyn; Aston, Nicola Mary; Bamfborough, Paul; Bamford, Mark James; Cockerill, George Stuart; Merrick, Suzanne Joy; Smith, Kathryn; Jane, Walker, Ann Louise
PATENT ASSIGNEE(S): Glaxo Group Limited, UK
SOURCE: PCT Int. Appl., 57 pp.
DOCUMENT TYPE: CODEN: PIXXD2
LANGUAGE: Patent
FAMILY ACC. NUM. COUNT: English
PATENT INFORMATION: 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|-------------------|-----------------|------------|
| WO 2003032970 | A1 | 20030424 | WO 2002-EP11570 | 20021016 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1435933 | A1 | 20040714 | EP 2002-779491 | 20021016 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK | | | | |
| JP 2005509622 | T2 | 20050414 | JP 2003-535774 | 20021016 |
| PRIORITY APPL. INFO.: | | | GB 2001-24928 | A 20011017 |
| OTHER SOURCE(S): | | MARPAT 138:337839 | WO 2002-EP11570 | W 20021016 |
| GI | | | | |



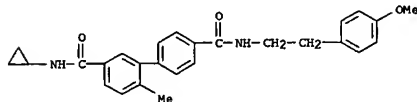
I



II

AB The title compds. [I: R1 = (un)substituted Ph; R2 = H, alkyl,

L4 ANSWER 57 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 (CH₂)_qcycloalkyl; R₃ = CONH(CH₂)_qR₄; when q = 0-2, R₄ = H, alkyl, cycloalkyl, etc.; and when q = 2, R₄ addnl. = alkoxy, OH, etc.; U = Me, halo; W = Me, Cl; X, Y = H, Me, halo; m = 0-4 (carbon atoms may be optionally substituted with up to two groups selected from alkyl); n = 0-2; v = 0-2; q = 0-2], use as pharmaceuticals, particularly as p38 kinase inhibitors, were prepd. E.g., a multi-step synthesis of the carboxamide II, starting from 3-aminobenzonitrile and 4-bromobenzoyl chloride, was given.
 IT 515130-95-7P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of 5'-carbamoyl-2'-methyl-1,1'-biphenyl-4-carboxamides as p38 kinase inhibitors)
 RN 515130-95-7 HCAPLUS
 CN [1,1'-Biphenyl]-3,4'-dicarboxamide, N3-cyclopropyl-N4'-[2-(4-methoxyphenyl)ethyl]-6-methyl- (9CI) (CA INDEX NAME)

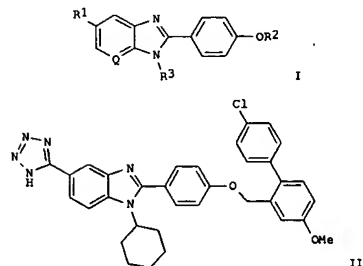


REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 58 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2003:261620 HCAPLUS
 DOCUMENT NUMBER: 138:287673
 TITLE: Preparation of phenylbenzimidazole compounds useful for treating hepatitis C virus
 INVENTOR(S): Priestley, Eldon Scott; Decicco, Carl P.; Hudyma, Thomas W.; Zheng, Xiaofan
 PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA
 SOURCE: PCT Int. Appl., 74 pp.
 CODEN: PIKXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-------------------|-------------|
| WO 2003026587 | A2 | 20030403 | WO 2002-US30989 | 20020926 |
| WO 2003026587 | A3 | 20031106 | | |
| W: AE, AG, AL, AM, AT, AU, A2, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 2003134853 | A1 | 20030717 | US 2002-259041 | 20020926 |
| EP 1429759 | A2 | 20040623 | EP 2002-773657 | 20020926 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK | | | | |
| US 2004067976 | A1 | 20040408 | US 2003-648673 | 20030827 |
| US 6903374 | B2 | 20041012 | | |
| PRIORITY APPLN. INFO.: | | | | |
| | | | US 2001-324874P | P 20010926 |
| | | | US 2002-259041 | B1 20020926 |
| | | | WO 2002-US30989 | W 20020926 |
| OTHER SOURCE(S): | | | HARPAT 138:287673 | |
| GI | | | | |

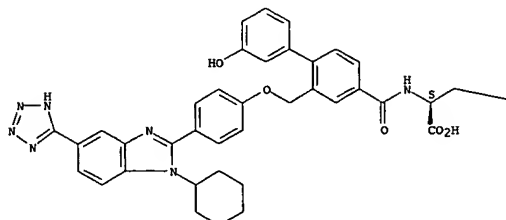
L4 ANSWER 58 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



AB Compds. of formula I [Q = CH, N; R₁ = tetrazolyl, MeCONHSO₂, PhCONHSO₂, etc.; R₂ = CH₂-aryl, CH₂H₂, etc.; R₃ = cycloalkyl] are prepared which are useful in treating viral hepatitis C. Thus, II was prepared and had an IC₅₀ of 0.14 μM against HCV NS5B RdRp (RNA-dependent RNA polymerase).
 IT 503858-04-6P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of phenylbenzimidazole compds. for treating hepatitis C viral infection)
 RN 503858-04-6 HCAPLUS
 CN L-Tyrosine, N-[[2-[[4-[[1-cyclohexyl-5-(1H-tetrazol-5-yl)-1H-benzimidazol-2-yl]phenoxy]methyl]-3'-hydroxy[1,1'-biphenyl]-4-yl]carbonyl]- (9CI) (CA INDEX NAME)

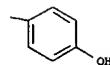
Absolute stereochemistry.

PAGE 1-A



L4 ANSWER 58 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

PAGE 1-B

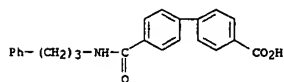


L4 ANSWER 59 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2003:174344 HCAPLUS
 DOCUMENT NUMBER: 138:221700
 TITLE: Preparation and uses of conjugated solid supports for boronic acids
 INVENTOR(S): Hall, Dennis G.
 PATENT ASSIGNEE(S): The Governors of The University of Alberta, Can.
 SOURCE: U.S. Pat. Appl. Publ., 45 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|------------|
| US 2003044840 | A1 | 20030306 | US 2001-943465 | 20010831 |
| US 6919382 | B2 | 20050719 | | |
| CA 2356455 | AA | 20020228 | CA 2001-2356455 | 20010831 |
| | | | US 2000-229833P | P 20000831 |
| | | | US 2000-235386P | P 20000925 |
| | | | CA 2000-2317191 | A 20000831 |

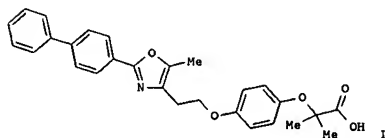
PRIORITY APPLN. INFO.:

OTHER SOURCE(S): CASREACT 138:221700
 AB The invention provides novel solid supports comprising dihydroxyalkyl aminoalkyl and dihydroxyalkylaminobenzyl groups [e.g., N,N-diethanolaminomethyl polystyrene, (I)], and methods for making and using them. The supports are particularly useful for immobilizing and derivatizing functionalized boronic acids for use in solid phase synthesis, such as those used in combinatorial chemistries. For example, when I is coupled with p-MeC6H4B(OH)2 the corresponding resin bound arylboronic acid is formed nearly quantitatively. The compounds and methods of the invention are also useful as scavenger solid supports, e.g., in solution-phase parallel synthesis of small mol. libraries, and for use in resin-to-resin transfer reactions via phase transfer of solid supported boronic acids under both aqueous and anhydrous conditions. The methods of the invention provide convergent solid-phase synthesis of sym. or unsym. functionalized compounds, such as biphenyl compounds. Also provided are synthesizer devices, e.g., semiautomated parallel synthesizers.
 IT 397843-95-7P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and uses of conjugated solid supports for boronic acids)
 RN 397843-95-7 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxylic acid, 4'-[(3-phenylpropyl)amino]carbonyl- (9CI) (CA INDEX NAME)

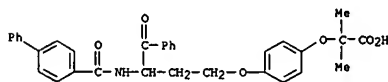


REFERENCE COUNT: 122 THERE ARE 122 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

L4 ANSWER 60 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2003:167955 HCAPLUS
 DOCUMENT NUMBER: 138:353870
 TITLE: Application of the Dakin-West Reaction for the Synthesis of Oxazole-Containing Dual PPARα/γ Agonists
 AUTHOR(S): Godfrey, Alexander G.; Brooks, Dawn A.; Hay, Lynne A.; Peters, Mary; McCarthy, James R.; Mitchell, David
 CORPORATE SOURCE: Lilly Research Laboratories, Eli Lilly Company, Indianapolis, IN, 46285, USA
 SOURCE: Journal of Organic Chemistry (2003), 68(7), 2623-2632
 CODEN: JOCEAH; ISSN: 0022-3263
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 138:353870
 GI



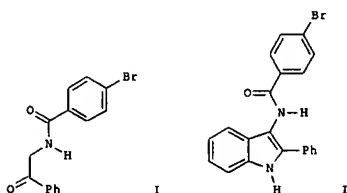
AB An improved method for the preparation of a series of oxazole-containing dual PPARα/γ agonists, e.g., I, is described. A synthetic sequence utilizing a Dakin-West reaction was devised that allows for the introduction of the oxazole ring either late in the synthetic sequence via aminomalonate-derived chemical or in pivotal SAR intermediates derived from aspartic acid.
 IT 328919-93-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of oxazoles via Dakin West reaction of amino acid derivs. to form keto amides with subsequent cyclodehydration)
 RN 328919-93-3 HCAPLUS
 CN Propanoic acid, 2-(4-[3-[(1,1'-biphenyl)-4-ylcarbonyl]amino]-4-oxo-4-phenylbutoxy]phenoxy)-2-methyl- (9CI) (CA INDEX NAME)



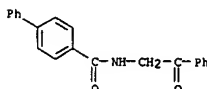
REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 59 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 FORMAT

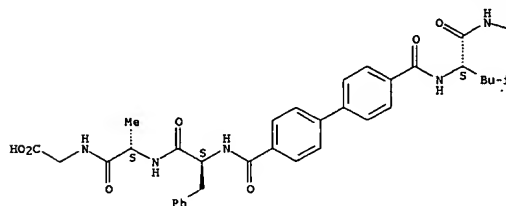
L4 ANSWER 61 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2003:151381 HCAPLUS
 DOCUMENT NUMBER: 138:353801
 TITLE: Fischer synthesis of 3-(N-acylamino)-2-phenylindoles
 AUTHOR(S): Przhval'skii, N. M.; Skvortsova, N. S.; Magedov, I. V.
 CORPORATE SOURCE: K. A. Timiryazev Moscow Agricultural Academy, Moscow, 127550, Russia
 SOURCE: Chemistry of Heterocyclic Compounds (New York, NY, United States) (Translation of Khimiya Geterotsiklicheskh Soedinenii) (2002), 38(9), 1055-1061
 CODEN: CHCCAL; ISSN: 0009-3122
 PUBLISHER: Kluwer Academic/Consultants Bureau
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 138:353801
 GI



AB Phenylhydrazones were obtained by the reaction of phenylhydrazine with o-(N-acylamino)acetophenones, e.g., I, and were converted into 3-(N-acylamino)indoles, e.g., II, by the Fischer cyclization.
 IT 37061-74-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of (acylamino)phenylindoles via coupling of aminoacetophenone with acyl chlorides followed by condensation with phenylhydrazine, heterocyclization, and rearrangement)
 RN 37061-74-8 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-(2-oxo-2-phenylethyl)- (9CI) (CA INDEX NAME)

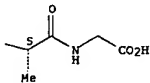


REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



L4 ANSWER 63 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

PAGE 1-B



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 64 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:89884 HCAPLUS

DOCUMENT NUMBER: 138:267672

TITLE: Molecular Structures of Human Factor Xa Complexed with Ketopiperazine Inhibitors: Preference for a Neutral Group in the S1 Pocket

AUTHOR(S): Maignan, Sebastien; Guilloteau, Jean-Pierre; Choi-Sledeski, Yong Mi; Becker, Michael R.; Ewing, William R.; Pauls, Henry W.; Spada, Alfred P.; Mikol, Vincent

CORPORATE SOURCE: Department of Structural Biology, Aventis Pharma, Vitry/Seine, F-94403, Fr.

SOURCE: Journal of Medicinal Chemistry (2003), 46(5), 685-690
CODEN: JMCMAR; ISSN: 0022-2623
American Chemical Society

PUBLISHER: Journal

DOCUMENT TYPE: English

LANGUAGE: English
AB The structures of the noncovalent complex of human factor Xa (fXa) with four non-peptide inhibitors containing a central sulfonylpiperazinone scaffold have been determined to about 2.1 Å resolution. Highly potent fXa inhibitors containing both neutral groups such as chlorobenzothiophene or chlorothiophene

and basic groups such as benzamidine were shown to interact in the S1 pocket through the neutral group whereas the S4 pocket is occupied by the basic moiety. The scaffold comprising the sulfonyl keto piperazine moiety might play a pivotal role in the orientation of substituents, since there is a strong hydrogen bond between Gly219 of fXa and the carbonyl oxygen of the piperazine. This unique reverse binding mode is heretofore unreported in fXa and shows that electrostatic interactions in the S1 subsite are not an absolute requirement to maintain high affinity. Selectivity against

other serine proteases can be readily explained in light of these structural results. It has opened up new prospects for designing fXa inhibitors with increased oral bioavailability.

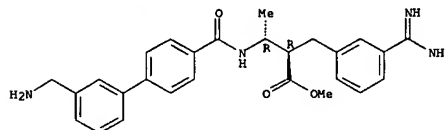
IT 296761-71-2, RPR 128515

RL: BSU (Biological study, unclassified); BIOL (Biological study) (inhibition of factor Xa; mol. structures of human factor Xa complexed with ketopiperazine inhibitors indicate a preference for a neutral group in the S1 pocket)

RN 296761-71-2 HCAPLUS

CN Benzenepropanoic acid, 3-(aminoininomethyl)-a-[(1R)-1-[[[3'-(aminomethyl)[1,1'-biphenyl]-4-yl]carbonyl]amino]ethyl]-, methyl ester, (aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 64 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 65 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:87650 HCAPLUS

DOCUMENT NUMBER: 138:397876

TITLE: Unusual Fluorescent Properties of N-(9-Anthroyl) Derivatives of Aromatic Amines

AUTHOR(S): Molotkovsky, Jul. G.
CORPORATE SOURCE: Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, Russian Academy of Sciences, Moscow, 117997, Russia

SOURCE: Russian Journal of Bioorganic Chemistry (Translation of Bioorganicheskaya Khimiya) (2003), 29(1), 94-95
CODEN: RJBCEJ; ISSN: 1068-1620
MAIK Nauka/Interperiodica Publishing

PUBLISHER: Journal

DOCUMENT TYPE: English

LANGUAGE: English
AB 9-Anthroyl derivs. of some aromatic amines exhibit unusual fluorescence characteristics. In solvents of low and medium polarity (hexane, chloroform, DMF, and tert-butanol), their emission maxima are shifted to longer wavelengths as compared to the spectra recorded in polar solvents (ethanol and methanol); the red shift is accompanied by an increase in the fluorescence quantum yield. Possible reasons of such an anomalous spectral shift are discussed.

IT 529484-27-3

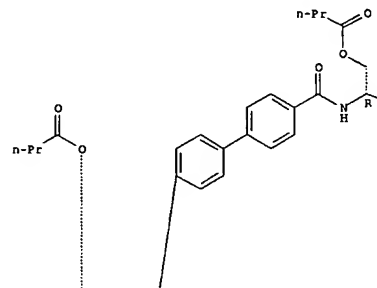
RL: BSU (Biological study, unclassified); PAP (Properties); BIOL (Biological study) (unusual fluorescent properties of N-(9-anthroyl) derivs. of aromatic amines)

RN 529484-27-3 HCAPLUS

CN Butanoic acid, [1,1'-biphenyl]-4,4'-diylbis[carbonylimino[(1S,2R)-1-[[[9-anthracenyl]carbonyl]amino]phenyl]-2,1,3-propanetriyl]] ester (9CI) (CA INDEX NAME)

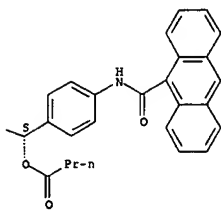
Absolute stereochemistry.

PAGE 1-A

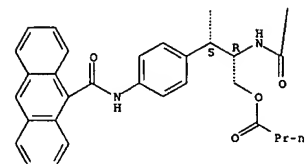


L4 ANSWER 65 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

PAGE 1-B

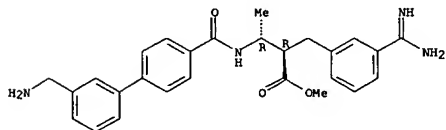


PAGE 2-A



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 66 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 66 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:894400 HCAPLUS
DOCUMENT NUMBER: 138:133092
TITLE: Crystal Structures of Two Potent Nonamidine Inhibitors Bound to Factor Xa
AUTHOR(S): Adler, Marc; Kochanny, Monica J.; Ye, Bin; Rumennik, Galina; Light, David R.; Biancalana, Sara; Whitlow, Marc
CORPORATE SOURCE: Berlex Biosciences, Richmond, CA, 94804-0099, USA
SOURCE: Biochemistry (2002), 41(52), 15514-15523
CODEN: BICHAW; ISSN: 0006-2960
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB There has been intense interest in the development of factor Xa inhibitors for the treatment of thrombotic diseases. Our laboratory has developed a series

of novel non-amidine inhibitors of factor Xa. This paper presents two crystal structures of compds. from this series bound to factor Xa. The first structure is derived from the complex formed between factor Xa and compound 1. Compound 1 was the first non-amidine factor Xa inhibitor from our

laboratory that had measurable potency in an in vitro assay of anticoagulant activity. The second compound, 2, has a molar affinity for factor Xa (K_{app}) of 7 pM and good bioavailability. The two inhibitors bind in an L-shaped conformation with a chloroacrom. ring buried deeply in the S1 pocket. The opposite end of these compds. contains a basic substituent that extends into the S4 binding site. A chlorinated Ph ring bridges the substituents in the S1 and S4 pockets via amide linkers. The overall conformation is similar to the previously published structures for amidine-based inhibitors complexed with factor Xa. However, there are significant differences in the interactions between the inhibitor and the protein at the atomic level. Most notably, there is no group that forms a salt bridge with the carboxylic acid at the base of the S1 pocket (Asp189). Each inhibitor forms only one well-defined hydrogen bond to the protein. There are no direct charge-charge interactions. The results indicate that electrostatic interactions play a secondary role in the binding of these potent inhibitors.

IT 296761-71-2, RPR-128515
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(structure-activity relationship of factor Xa inhibitors; crystal structures of two potent nonamidine inhibitors bound to factor Xa)

RN 296761-71-2 HCAPLUS

CN Benzenepropanoic acid, 3-(aminomimomethyl)- α -[(1R)-1-[[[3'-(aminomethyl)[1,1'-biphenyl]-4-yl]carbonyl]amino]ethyl]-, methyl ester, (eR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 67 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:814268 HCAPLUS
DOCUMENT NUMBER: 137:333140
TITLE: Guanylylhydrazone inhibitors of protein production from AU-rich element-containing mRNAs, their synthesis and use in therapy
INVENTOR(S): Giordano, Tony; Sturgess, Michael A.
PATENT ASSIGNEE(S): Message Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 147 pp.
CODEN: FIXX02
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 2002083842 | A2 | 20021024 | WO 2002-US10898 | 20020408 |
| WO 2002083842 | A3 | 20030501 | | |
| WO 2002083842 | C2 | 20040429 | | |
| W: AU, CA, CH, DE, DK, ES, GB, JP, NO, SE, US | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR | | | | |
| US 2003199453 | A1 | 20031023 | US 2002-117955 | 20020408 |
| US 6872850 | B2 | 20050329 | | |
| PRIORITY APPL. INFO.: MARPAT 137:333140 | | | | |
| OTHER SOURCE(S): | | | | |

AB The invention features guanylylhydrazone compds.
R1C(:X)C6H4CONHCH(CH2R2)CON(R3)(CH2)mN(R4)COCH(CH2R5)NHCOC6H4C(R6):NHNH2 (I; R1, R6 = alkyl, aryl; R2, R5 = H, alkyl, aryl; R3, R4 = H, alkyl; X = O, H2N(HN:)CHN-; m \geq 2) that inhibit secretion of a protein encoded by an AU-rich element-containing (ARE)-mRNA or that modulate regulation of an ARE-mRNA. I are useful for the treatment or prevention of conditions involving proteins encoded by ARE-mRNAs, such as tumor necrosis factor α , interleukins, interferons, and cyclooxygenases 1 and 2. Such conditions include inflammation, arthritis, autoimmune diseases, septic shock, blood clotting, and stroke. Thus, compds. were tested in a high-throughput, macrophage-based luciferase reporter assay. Mouse 264.7 cells transformed with an expression vector containing the luciferase gene flanked by CMV promoter and tumor necrosis factor α 3'-UTR were used. Compds. identified in this assay were tested for their ability to inhibit tumor necrosis factor α secretion.

IT 473913-63-2P, MES 10244
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(guanylylhydrazone inhibitors of protein production from AU-rich element-containing mRNAs, their synthesis and use in therapy)

RN 473913-63-2 HCAPLUS

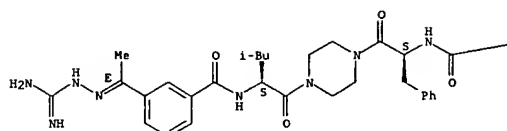
CN [1,1'-Biphenyl]-4-carboxamide, N-[(1S)-2-[(2S)-2-[[[3-[(1E)-1-[(aminomimomethyl)hydrazone]ethyl]benzoyl]amino]-4-methyl-1-oxopentyl]-1-piperazinyl]-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

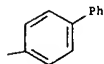
Double bond geometry as shown.

L4 ANSWER 67 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

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L4 ANSWER 68 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

AB The title compds. [I; X = NR1, O, S; Y1, Y2 = O, S; Z = NR2, O, S; m = 0-1; A = a bond, alkyl, alkenyl, haloalkyl, heteroalkyl; R1, R2 = H, alkyl, haloalkyl; R3, R6 = H, halo, alkyl, etc.; R4 = H, alkyl, hydroxyalkyl, etc.; R5 = bicyclic or tricyclic group selected from (un)substituted cycloalkyl, aryl, heterocycloalkyl or heteroaryl], useful as metalloproteinase inhibitors, especially as inhibitors of MMP12, were prepared

Thus, reacting 4-carboxyphenylboronic acid with 5-[hydroxy(4-iodophenyl)methyl]imidazolidine-2,4-dione (preparation given) in the presence

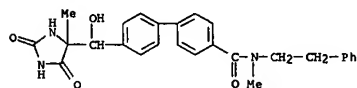
of NaHCO₃ and Pd(OAc)₂ in Me₂CO and H₂O afforded 344 II.

IT 459817-92-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREF (Preparation); USES (Uses)

RN 459817-92-6 HCAPLUS

CN [1,1'-Biphenyl]-4-carboxamide, 4'-[hydroxy(4-methyl-2,5-dioxo-4-imidazolidinyl)methyl]-N-methyl-N-(2-phenylethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 68 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:736238 HCAPLUS

DOCUMENT NUMBER: 137:247697

TITLE: Preparation of 5-substituted imidazolidine-2,4-diones as metalloproteinase inhibitors

INVENTOR(S): Lepistö, Matti; Munck Af Rosenschoeld, Magnus

PATENT ASSIGNEE(S): Astrazeneca AB, Swed.

SOURCE: PCT Int. Appl., 111 pp.

CODEN: PIXX02

DOCUMENT TYPE: Patent

LANGUAGE: English

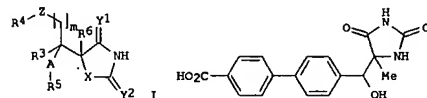
FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2002074752 | A1 | 20020926 | WO 2002-SE479 | 20020313 |
| WO 2002074752 | C1 | 20040422 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SI, SZ, T2, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2440475 | AA | 20020926 | CA 2002-2440475 | 20020313 |
| EP 1370538 | A1 | 20031217 | EP 2002-704038 | 20020313 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| EE 200300452 | A | 20040216 | EE 2003-452 | 20020313 |
| BR 2002008062 | A | 20040302 | BR 2002-8062 | 20020313 |
| CN 1509273 | A | 20040630 | CN 2002-809789 | 20020313 |
| CN 1509274 | A | 20040630 | CN 2002-809927 | 20020313 |
| JP 2004527512 | T2 | 20040909 | JP 2002-573761 | 20020313 |
| NZ 528141 | A | 20050527 | NZ 2002-528141 | 20020313 |
| ZA 2003006733 | A | 20041129 | ZA 2003-6733 | 20030828 |
| ZA 2003006738 | A | 20041129 | ZA 2003-6738 | 20030828 |
| NO 2003004027 | A | 20031105 | NO 2003-4027 | 20030911 |
| US 2004110809 | A1 | 20040610 | US 2004-471499 | 20040112 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | SE 2001-903 | A 20010315 |
| | | | WO 2002-SE479 | W 20020313 |

OTHER SOURCE(S): MARPAT 137:247697

GI



L4 ANSWER 69 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:736238 HCAPLUS

DOCUMENT NUMBER: 137:247696

TITLE: Preparation of 5-substituted imidazolidine-2,4-diones as metalloproteinase inhibitors

INVENTOR(S): Eriksson, Anders; Lepistö, Matti; Lundkvist, Michael;

Munck Af Rosenschoeld, Magnus; Zlatoidsky, Pavol

PATENT ASSIGNEE(S): Astrazeneca AB, Swed.

SOURCE: PCT Int. Appl., 300 pp.

CODEN: PIXX02

DOCUMENT TYPE: Patent

LANGUAGE: English

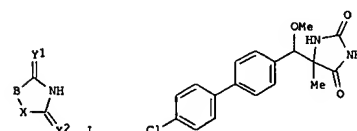
FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|-------------|
| WO 2002074750 | A1 | 20020926 | WO 2002-SE475 | 20020313 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SI, SZ, T2, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2440632 | AA | 20020926 | CA 2002-2440632 | 20020313 |
| EE 200300439 | A | 20031215 | EE 2003-439 | 20020313 |
| EP 1370536 | A1 | 20031217 | EP 2002-704034 | 20020313 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| BR 2002008105 | A | 20040309 | BR 2002-8105 | 20020313 |
| CN 1509275 | A | 20040630 | CN 2002-810041 | 20020313 |
| JP 2004527511 | T2 | 20040909 | JP 2002-573759 | 20020313 |
| EP 1676846 | A2 | 20060705 | EP 2006-8158 | 20020313 |
| EP 1676846 | A3 | 20060726 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| NO 2003004025 | A | 20031113 | NO 2003-4025 | 20030911 |
| US 2004147573 | A1 | 20040729 | US 2003-471808 | 20030912 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | SE 2001-902 | A 20010315 |
| | | | SE 2001-903 | A 20010315 |
| | | | EP 2002-704031 | A3 20020313 |
| | | | WO 2002-SE475 | W 20020313 |

OTHER SOURCE(S): MARPAT 137:247696

GI



L4 ANSWER 69 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

AB The title compds. [1: X = NR1, O, S; B = C, CH, and is a point of attachment of one or more other functional groups or side chains; Y1, Y2 = O, S; R1 = H, alkyl, haloalkyl], useful in the treatment of a disease or condition mediated by one or more metalloproteinase enzymes (no biol. data), were prepared E.g., a 4-step synthesis of 11, starting with 4-(4-chlorophenyl)benzaldehyde, was given.

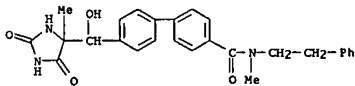
IT 459817-92-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 5-substituted imidazolidine-2,4-diones as metalloproteinase inhibitors)

RN 459817-92-6 HCAPLUS

CN [1,1'-Biphenyl]-4-carboxamide, 4'-[hydroxy(4-methyl-2,5-dioxo-4-imidazolidinyl)methyl]-N-methyl-N-(2-phenylethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

11

THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 70 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:692510 HCAPLUS

DOCUMENT NUMBER: 138:314760

TITLE: Exploration of the DTrp-NMeLys motif in the search for potent somatostatin antagonists
 AUTHOR(S): Rajeswaran, W. G.; Murphy, William A.; Taylor, John E.; Coy, David H.

CORPORATE SOURCE: Peptide Research Labs, SL 12, Department of Medicine, Tulane University Health Sciences Center, New Orleans, LA, 70112, USA

SOURCE: Peptides: The Wave of the Future, Proceedings of the Second International and the Seventeenth American Peptide Symposium, San Diego, CA, United States, June 9-14, 2001 (2001), 620-621. Editor(s): Lebl, Michal; Houghten, Richard A. American Peptide Society: San Diego, Calif.

CODEN: 69DBAL; ISBN: 0-9715560-0-8

DOCUMENT TYPE: Conference

LANGUAGE: English

AB The Na-methylation at Lys in the peptide sequence Cpa-cyclo[DCys-Tyr-DTrp-Lys-Thr-Cys]-Nal-NH₂, which increases the GH release inhibitory potency and type 5 affinity, was studied further to search for addnl. potent antagonists. Synthetic analogs were tested for their ability to inhibit somatostatin-inhibited GH release from rat pituitary cells in culture and to displace 125I-labeled somatostatin from CHO cells transfected with the 5 known human somatostatin receptors. Replacement of lipophilic Nal12 at the C-terminus with a hydrophilic His12 resulted in increased affinity and selectivity for the type 2 receptor. When the C-terminus was replaced by Tyr12, it resulted in high selectivity for sst2, but with decreased affinity and potency. The effect of dimerization of the peptide ligands using linkers of varied flexibility and hydrophilicity was studied. In the first experiment 4,4'-biphenyldicarboxylic acid was used to generate a bivalent peptide ligand on the resin. The generated bivalent peptide ligand bound to type 2 receptor with good selectivity, but it was 34-fold less potent than the monovalent ligand in the GH release assay.

IT 455333-39-8

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(exploration of DTrp-NMeLys motif in search for potent somatostatin antagonists in relation to their biol. activity)

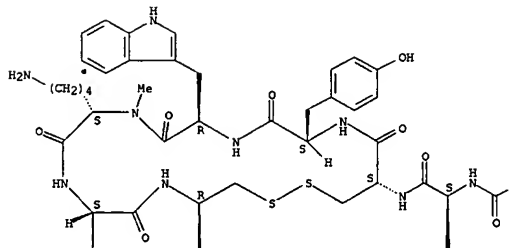
RN 455333-39-8 HCAPLUS

CN L-Alaninamide, 1,1'-([1,1'-biphenyl]-4,4'-diylldicarbonyl)bis[4-chloro-L-phenylalanyl-D-cysteinyl-L-tyrosyl-D-tryptophyl-N2-methyl-L-lysyl-L-threonyl-L-cysteinyl-3-(2-naphthalenyl)-, cyclic (2-7), (2'-7')-bis(disulfide) (9CI) (CA INDEX NAME)

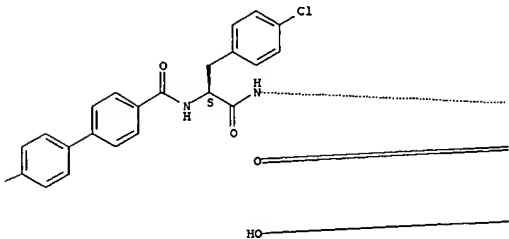
Absolute stereochemistry.

L4 ANSWER 70 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

PAGE 1-A

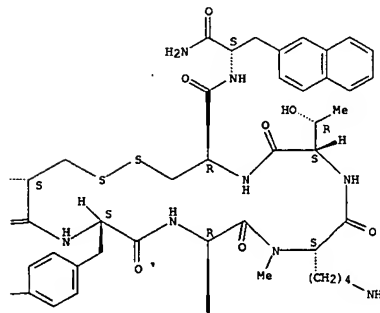


PAGE 1-B

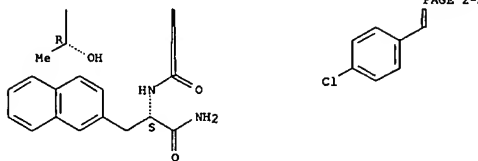


L4 ANSWER 70 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

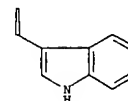
PAGE 1-C



PAGE 2-A



PAGE 2-C



REFERENCE COUNT:

3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 71 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2002:575041 HCAPLUS
 DOCUMENT NUMBER: 137:140338
 TITLE: Preparation of aminoethanol derivatives as cholesteryl ester transfer protein inhibitors for treatment of hyperlipidemia, etc.
 INVENTOR(S): Kori, Masakuni; Hamamura, Kazumasa; Fuse, Hiromitsu; Yamamoto, Toshihiro
 PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
 SOURCE: PCT Int. Appl., 748 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2002059077 | A1 | 20020801 | WO 2002-JP532 | 20020125 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| JP 2002293764 | A2 | 20021009 | JP 2002-17487 | 20020125 |
| EP 1362846 | A1 | 20031119 | EP 2002-710345 | 20020125 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| US 2004127574 | A1 | 20040701 | US 2003-470351 | 20030725 |
| US 6982348 | B2 | 20060103 | | |

PRIORITY APPL. INFO.: JP 2001-19280 A 20010126
 WO 2002-JP532 W 20020125

OTHER SOURCE(S): MARPAT 137:140338
 AB The title compds. Ar1CH(OR'')CH(CH2Ar2)NR' [Ar1 represents an optionally substituted aromatic ring group; Ar2 represents a substituted aromatic ring group; OR'' represents optionally protected hydroxy; R represents acyl; and R' represents hydrogen or optionally substituted hydrocarbyl] are prepared. Comps. of this invention in vitro showed IC50 values of 0.0084 μ M to 0.4 μ M against cholesteryl ester transfer protein. A process for preparing the title compds. is claimed.
 IT 444912-29-2P
 RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of aminoethanol derivs. as cholesteryl ester transfer protein inhibitors for treatment of hyperlipidemia)
 RN 444912-29-2 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-[(1R,2S)-2-(4-fluorophenyl)-2-hydroxy-1-[[4-(trifluoromethyl)phenyl]methyl]ethyl]-, rel- (9CI) (CA INDEX NAME)

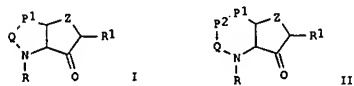
Relative stereochemistry.

L4 ANSWER 72 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2002:55497 HCAPLUS
 DOCUMENT NUMBER: 137:125392
 TITLE: Preparation of N-acyl azabicyclic compounds as inhibitors of cruzipain and other cysteine proteases
 INVENTOR(S): Quibell, Martin
 PATENT ASSIGNEE(S): Incenta Limited, UK
 SOURCE: PCT Int. Appl., 243 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2002057270 | A1 | 20020725 | WO 2002-GB184 | 20020117 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| CA 2436462 | AA | 20020725 | CA 2002-2436462 | 20020117 |
| EP 1362052 | A1 | 20031119 | EP 2002-732145 | 20020117 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| BR 2002006501 | A | 20040113 | BR 2002-6501 | 20020117 |
| JP 2004518674 | T2 | 20040624 | JP 2002-557947 | 20020117 |
| NZ 526913 | A | 20041224 | NZ 2002-526913 | 20020117 |
| ZA 2003005259 | A | 20040510 | ZA 2003-5259 | 20030708 |
| NO 2003003220 | A | 20030917 | NO 2003-3220 | 20030716 |
| US 2004138250 | A1 | 20040715 | US 2004-466384 | 20040108 |

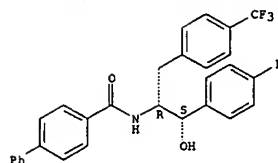
PRIORITY APPL. INFO.: GB 2001-1179 A 20010117
 US 2001-275359P P 20010313
 WO 2002-GB184 W 20020117

OTHER SOURCE(S): MARPAT 137:125392
 GI



AB Title compds. I and II [R1 = H, alkyl, cycloalkyl, aryl, arylalkyl; Z = O, S, CR2R3, NR4; P1 = CR5R6; P2 = CR7R8; Q = CR9R10, NR11; R = U-Vn-Wn-Xm-Y, where Y = CR12R13CO; X = CR14R15; W = O, S, CO, SO, SO2, NR16; V = CO, CS, SO, SO2, SO2NH, O2C, NHCO, NHSO, NHSO2, O2CNH, CONH, CR17R18; m, n = 0-3, n = 0 or 1; U = a stable 5- to 7-membered monocyclic or 8- to 11-membered bicyclic ring containing 0-4 heteroatoms; R4, R11-R18 = any group given for R1, R2, R3, R5-R10 = any group given for R1, OH, (cyclo)alkoxy, arylalkyl, alkylamino, etc (provided that for m > 1, Vn

L4 ANSWER 71 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

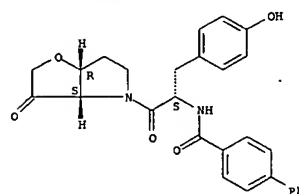


REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 72 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 contains a max. of one carbonyl or sulfonyl group] were prepd. as inhibitors of cruzipain (a gene product of Trypanosoma cruzi parasite) and other cysteine proteases for use as therapeutic agents, for example in the treatment of Chagas' disease. Thus, N-(4-tert-butylbenzoyl)-L-tyrosine (3aS,6aR)-[3-oxohexahydrofuro[3,2-b]pyrrol-4-yl]amide was prepd. and assayed for inhibition of cruzipain, bovine cathepsin S, and human cathepsins L and K (Ki = 0.2, >100, >35, and >5 μ M, resp.).
 IT 443897-69-6P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of aminocyclopentanecarboxylic acid-derived bicyclic compds. as inhibitors of cruzipain and other cysteine proteases)

RN 443897-69-6 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-[(1S)-2-[(3aS,6aR)-hexahydro-3-oxo-4H-furo[3,2-b]pyrrol-4-yl]-1-[(4-hydroxyphenyl)methyl]-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

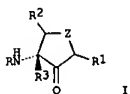


REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 73 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 2002:555478 HCAPLUS
 DOCUMENT NUMBER: 137:125391
 TITLE: Preparation of 4-(acylamino)tetrahydro-3-furanones or
 3-thiophenones and 2-(acylamino)cyclopentanones as
 inhibitors of cruzipain and other cysteine proteases
 INVENTOR(S): Quibell, Martin
 PATENT ASSIGNEE(S): Incenta Limited, UK
 SOURCE: PCT Int. Appl., 135 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2002057249 | A1 | 20020725 | WO 2002-GB190 | 20020117 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TH | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| CA 2435117 | AA | 20020725 | CA 2002-2435117 | 20020117 |
| EP 1362042 | A1 | 20031119 | EP 2002-732147 | 20020117 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| JP 2004522738 | T2 | 20040729 | JP 2002-557930 | 20020117 |
| NZ 526914 | A | 20050225 | NZ 2002-526914 | 20020117 |
| ZA 2003005262 | A | 20040517 | ZA 2003-5262 | 20030708 |
| US 2004127549 | A1 | 20040701 | US 2004-466474 | 20040108 |
| PRIORITY APPLN. INFO.: | | | GB 2001-1187 | A 20010117 |
| | | | US 2001-275505P | P 20010313 |
| | | | WO 2002-GB190 | W 20020117 |

OTHER SOURCE(S): MARPAT 137:125391
 GI

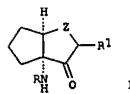


AB Title compds. I [R1, R2 = H, alkyl, cycloalkyl, aryl, arylalkyl; Z = O, S, CH2; R3 = alkyl, cycloalkyl, aryl, arylalkyl; R = U-Vm-Wn-Xm'-Y, where Y = CR4R5CO (R4-R10 = any group given for R1); X = CR6R7; V = O, S, CO, SO, SO2, NR8; W = CO, CS, SO, SO2, SO2NH, O2C, NHCO, NH5O, NH5O2, O2CNH, CONH,

L4 ANSWER 74 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 2002:555475 HCAPLUS
 DOCUMENT NUMBER: 137:109484
 TITLE: Preparation of 1-aminocyclopentanecarboxylic acid-derived bicyclic compounds as inhibitors of cruzipain and other cysteine proteases
 INVENTOR(S): Quibell, Martin; Ramjee, Manoj Kumar
 PATENT ASSIGNEE(S): Incenta Limited, UK
 SOURCE: PCT Int. Appl., 118 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2002057246 | A2 | 20020725 | WO 2002-GB194 | 20020117 |
| WO 2002057246 | A3 | 20021121 | | |
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| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| CA 2434068 | AA | 20020725 | CA 2002-2434068 | 20020117 |
| EP 1358176 | A2 | 20031105 | EP 2002-715508 | 20020117 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| JP 2004520365 | T2 | 20040708 | JP 2002-557927 | 20020117 |
| NZ 526912 | A | 20050225 | NZ 2002-526912 | 20020117 |
| ZA 2003005260 | A | 20040513 | ZA 2003-5260 | 20030708 |
| US 2004106805 | A1 | 20040603 | US 2004-466385 | 20040108 |
| US 6958358 | B2 | 20051025 | | |
| PRIORITY APPLN. INFO.: | | | GB 2001-1204 | A 20010117 |
| | | | US 2001-275506P | P 20010313 |
| | | | WO 2002-GB194 | W 20020117 |

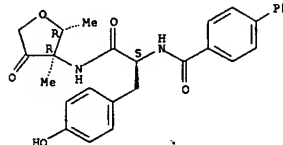
OTHER SOURCE(S): MARPAT 137:109484
 GI



AB Title compds. I [R1 = H, alkyl, cycloalkyl, aryl, arylalkyl; Z = O, S, CR2R3 (R2, R3 is any group given for R1 or R10, R15, R1NH, R12N), or NR4 (R4-R11 is any group given for R1); R = U-Vm-Wn-Xm'-Y, where Y = CR5R6CO; X = CR7R8; V = O, S, CO, SO, SO2, NR9; W = CO, CS, SO, SO2, SO2NH, O2C, NHCO, NH5O, NH5O2, O2CNH, CONH, or CR10R11; m, m' = 0-3, n = 0 or 1; U = a stable 5- to 7-membered monocyclic or 8- to 11-membered bicyclic ring containing 0-4 heteroatoms (provided that for m > 1, Vm contains a maximum of one

L4 ANSWER 73 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN (Continued)
 CR9R10; m, m' = 0-3; n = 0 or 1; U = a stable 5- to 7-membered monocyclic or 8- to 11-membered bicyclic ring contg. 0-4 heteroatoms (provided that for m > 1, Vm contains a max. of one carbonyl or sulfonyl group)] were prepd. as inhibitors of cruzipain (a gene product of Trypanosoma cruzi parasite) and other cysteine proteases for use as therapeutic agents, for example in the treatment of Chagas' disease. Thus, N-(2-pyridin-3-ylthiazole-4-carbonyl)-l-tyrosine [(R,R)-2,3-dimethyl-4-oxotetrahydrofuran-3-yl]amide was prepd. and assayed for inhibition of cruzipain, bovine cathepsin S, and human cathepsins L and K (Ki = <2, >50, >50, and >100 μM, resp.).
 IT 443924-12-7P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of (acylamino)tetrahydrofuranones or -thiophenones and -cyclopentanones as inhibitors of cruzipain and other cysteine proteases)
 RN 443924-12-7 HCAPLUS
 CN 0-erythro-2-Pentulose, 1,4-anhydro-3-[(2S)-2-[(1,1'-biphenyl)-4-ylcarbonyl]amino]-3-(4-hydroxyphenyl)-1-oxopropyl]amino]-3,5-dideoxy-3-C-methyl- (9CI) (CA INDEX NAME)

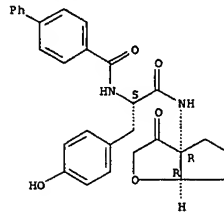
Absolute stereochemistry.



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 74 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN (Continued)
 carbonyl or sulfonyl group)] were prepd. as inhibitors of cruzipain (a gene product of Trypanosoma cruzi parasite) and other cysteine proteases for use as therapeutic agents, for example in the treatment of Chagas' disease. Thus, I (R1 = H, Z = O, R = p-tert-BuC6H4CO-Tyr) (II) was prepd. via intermediate (3aR,6aR)-[3-oxohexahydrocyclopenta(b)furan-3a-yl]carbamic acid 9H-fluoren-9-ylmethyl ester (8), which is available by a multistep procedure starting from cyclopentanone. Compd. 8 was attached to a linker and solid phase for coupling reactions with Fmoc-Tyr(OBu)-OH (Fmoc = fluorenylmethoxycarbonyl) and 4-tert-butylbenzoic acid. It was assayed for inhibition of cruzipain, bovine cathepsin S, and human cathepsins L and K (Ki = <2, >50, >20, and >100 μM, resp.).
 IT 443761-50-0P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of aminocyclopentanecarboxylic acid-derived bicyclic compds. as inhibitors of cruzipain and other cysteine proteases)
 RN 443761-50-0 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-[(1S)-2-[(3aR,6aR)-hexahydro-3-oxo-3aH-cyclopenta(b)furan-3a-yl]amino]-1-[(4-hydroxyphenyl)methyl]-2-oxoethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

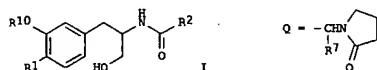


L4 ANSWER 75 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2002:484863 HCAPLUS
 DOCUMENT NUMBER: 137:47448
 TITLE: Preparation of substituted phenylalaninol derivatives as protein tyrosine phosphatase inhibitors
 INVENTOR(S): Larsen, Scott D.; May, Paul D.; Bleasdale, John E.; Liljebri, Charlotta; Schostarez, Heinrich Josef; Barf, Tjeerd; Nilsson, Marianne
 PATENT ASSIGNEE(S): U.S., 144 pp., Cont.-in-part of U.S. Ser. No. 138,642.
 SOURCE: CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| US 6410585 | B1 | 20020625 | US 1999-265410 | 19990310 |
| US 6353023 | B1 | 20020305 | US 1998-138642 | 19980824 |
| CA 2366308 | AA | 20000914 | CA 2000-2366308 | 20000309 |
| WO 2000053583 | A1 | 20000914 | WO 2000-US6022 | 20000309 |

V: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 EP 1161421 A1 20011212 EP 2000-917793 20000309
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
 JP 2002539115 T2 20021119 JP 2000-604023 20000309
 AU 769511 B2 20040129 AU 2000-38711 20000309
 PRIORITY APPLN. INFO.: US 1997-57730P P 19970828
 US 1998-138642 A2 19980824
 US 1999-265410 A 19990310
 WO 2000-US6022 W 20000309

OTHER SOURCE(S): MARPAT 137:47448
 GI

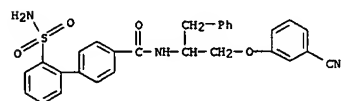


AB The invention comprises phenylalaninol derivs., e.g., I [R1 = OSO3H, OCH(CO2R5)2, OCH2CO2R5, OCH(CO2R5)CH2CO2R5, OC(CO2R5):CHCO2R5, CH2CH(CO2R5)2, CH:CH(CO2R5)2, OCH2CONHOH, N(CH2CO2R5)2, OCHFCO2R5 (R5 = H, alkyl, alkylphenyl); R2 = CHR7NHR6, group Q (R6 = alkyl, alkyl-CO2R5, alkyl-NHCO2R5, etc.); R7 = H, any group given for R6); R10 = H, CO2R5,

L4 ANSWER 76 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2002:407965 HCAPLUS
 DOCUMENT NUMBER: 137:384703
 TITLE: Design, synthesis, and SAR of monobenzenamides and aminoisoquinolines as factor Xa inhibitors
 AUTHOR(S): Zhang, Penglie; Zuckett, Jingmei F.; Woolfrey, John; Tran, Katherine; Huang, Brian; Wong, Paul; Sinha, Uma; Park, Gary; Reed, Andreas; Malinowski, John; Hollenbach, Stan; Scarborough, Robert M.; Zhu, Bing-Yan
 CORPORATE SOURCE: Department of Medicinal Chemistry, Millennium Pharmaceuticals, Inc., South San Francisco, CA, 94080, USA
 SOURCE: Bioorganic & Medicinal Chemistry Letters (2002), 12(12), 1657-1661
 CODEN: BMCLEB; ISSN: 0960-894X
 PUBLISHER: Elsevier Science Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 137:384703
 GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

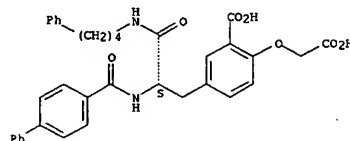
AB Monoamidine FXa inhibitors, e.g. I (R = H, Me, Ph, PhCH2), were designed and synthesized. SAR studies and mol. modeling led to the design of conformationally constrained diaryl ethers, e.g. II [X = C(O)NH, NHCO], as well as benzopyrrolidinone III as potent FXa inhibitors. The monoamidines show high efficacy in a DVT model, but lack desirable oral bioavailability. The benzopyrrolidinone-based aminoisoquinolines, e.g. IV, do not show significant improvement in oral bioavailability.
 IT 476352-35-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (ammonolysis; preparation of
 [(biphenyl)carboxamido]alkoxy)benzenecarboximide
 amides as factor Xa inhibitors)
 RN 476352-35-9 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, 2'-(aminosulfonyl)-N-[1-[(3-cyanophenoxy)methyl]-2-phenylethyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 75 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 CONHOH, 5-tetrazolyl, F, OCH2CO2R5], or their pharmaceutically acceptable salts, as small mol. wt., non-peptidic inhibitors of protein tyrosine phosphatase 1 (PTP1) which are useful for the treatment and/or prevention of non-insulin dependent diabetes mellitus. Thus, 5-[(2S)-2-[(2S)-2-[(tert-butoxycarbonyl)amino]-3-phenylpropanoyl]amino]-3-hydroxypropyl]-2-(carboxymethoxy)benzoic acid (claimed compd.) was prep'd. and showed 80% inhibition of protein tyrosine phosphatase 1B at a concn. of 10 µM.
 IT 292834-48-1P
 RL: CFP (Combinatorial preparation); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation); USES (Uses)
 (preparation of substituted phenylalanine derivs. as protein tyrosine phosphatase inhibitors)
 RN 292834-48-1 HCAPLUS
 CN Benzoic acid, 5-[(2S)-2-[(1,1'-biphenyl)-4-ylcarbonyl]amino]-3-oxo-3-[(4-phenylbutyl)amino]propyl]-2-(carboxymethoxy)- (9CI) (CA INDEX NAME)

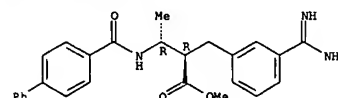
Absolute stereochemistry.



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 77 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2002:407950 HCAPLUS
 DOCUMENT NUMBER: 138:49645
 TITLE: Optimization of the β-Aminoester class of factor Xa inhibitors. part 2: Identification of FXV673 as a potent and selective inhibitor with excellent in vivo anticoagulant activity
 AUTHOR(S): Guertin, Kevin R.; Gardner, Charles J.; Klein, Scott I.; Zulli, Allison L.; Czekaj, Mark; Gong, Yong; Spada, Alfred P.; Cheney, Daniel L.; Maignan, Sebastien; Guilloteau, Jean-Pierre; Brown, Karen D.; Colussi, Dennis J.; Chu, Valeria; Heran, Christopher L.; Morgan, Suzanne R.; Bentley, Ross G.; Dunwiddie, Christopher T.; Leadley, Robert J.; Pauls, Henry W.
 CORPORATE SOURCE: Drug Innovation and Approval, Aventis Pharmaceuticals, Bridgewater, NJ, 08807, USA
 SOURCE: Bioorganic & Medicinal Chemistry Letters (2002), 12(12), 1671-1674
 CODEN: BMCLEB; ISSN: 0960-894X
 PUBLISHER: Elsevier Science Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Further optimization of the β-aminoester class of factor Xa (fXa) inhibitors is described culminating in the identification of FXV673, a potent and selective factor Xa inhibitor with excellent in vivo anticoagulant activity. An x-ray structure of FXV673 bound to human fXa is also presented. Based on its selectivity, potent in vivo activity and favorable pre-clin. safety profile, FXV673 was selected for further development and is currently undergoing clin. trials.
 IT 193153-07-0
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (optimization of β-Aminoester class of factor Xa inhibitors and identification of FXV673 in relation to anticoagulant activity)
 RN 193153-07-0 HCAPLUS
 CN Benzenepropanoic acid, 3-(aminoininomethyl)-α-[(1R)-1-[(1,1'-biphenyl)-4-ylcarbonyl]amino]ethyl]-, methyl ester, (αR)- (9CI) (CA INDEX NAME)

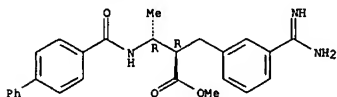
Absolute stereochemistry.



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 78 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 2002:407949 HCAPLUS
 DOCUMENT NUMBER: 136:49368
 TITLE: Optimization of the β -Aminoester class of factor Xa inhibitors. part 1: P4 and side-chain modifications for improved in vitro potency
 AUTHOR(S): Czekaj, Mark; Klein, Scott I.; Guertin, Kevin R.; Gardner, Charles J.; Zulli, Allison L.; Pauls, Henry W.; Spada, Alfred P.; Cheney, Daniel L.; Brown, Karen D.; Colussi, Dennis J.; Chu, Valeria; Leadley, Robert J.; Dunwiddie, Christopher T.
 CORPORATE SOURCE: Drug Innovation and Approval, Aventis Pharmaceuticals, Bridgewater, NJ, 08807, USA
 SOURCE: Bioorganic & Medicinal Chemistry Letters (2002), 12(12), 1667-1670
 CODEN: BMCLE8; ISSN: 0960-894X
 PUBLISHER: Elsevier Science Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 136:49368
 AB A systematic modification of the C3 side-chain of the β -aminoester class of factor Xa inhibitors and a survey of P4 variations is described. These changes have resulted in the identification of sub-nanomolar inhibitors with improved selectivity vs. related proteases. Coagulation parameters (i.e., APTT doubling concns.) are also improved.
 IT 193153-07-OP
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (optimization of β -Aminoester class of factor Xa inhibitors by P4 and side-chain modifications for improved in vitro potency in relation to anticoagulant activity)
 RN 193153-07-0 HCAPLUS
 CN Benzene-2-propanoic acid, 3-(aminomethyl)-a-[(1R)-1-[(1,1'-biphenyl]-4-ylcarbonyl)amino]ethyl-, methyl ester, (eR) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.



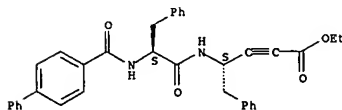
REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 79 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 2002:381268 HCAPLUS
 DOCUMENT NUMBER: 136:386403
 TITLE: Preparation of alkynylamino acids as selective immunoproteasome inhibitors and their intermediates
 INVENTOR(S): Kono, Yasushi; Ando, Naoki; Sawada, Takayuki; Kudo, Shinji; Kuriyama, Kazuhiko; Iwanami, Tetsu
 PATENT ASSIGNEE(S): Kyorin Pharmaceutical Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|--|----------|
| JP 2002145849 | A2 | 20020522 | JP 2000-343931 | 20001110 |
| PRIORITY APPLN. INFO.: | | | JP 2000-343931 | 20001110 |
| OTHER SOURCE(S): | | | CASREACT 136:386403; MARPAT 136:386403 | |
| AB ANR1[CHR2CONH]mCHR3CONHCHER4C.tplbond.CCOR5 [A = H, Z, Boc, trityl, PhCH2, CF3CO, RCO; R = (un)substituted Ph, naphthyl, styryl, etc.; R1 = H, Cl-4 alkyl, PhCH2; R2-R4 = H, (un)substituted Cl-4 alkyl, cyclohexylmethyl, (un)substituted PhCH2, naphthylmethyl, indolylmethyl, etc.; R5 = Cl-4 alkoxy, OH, Cl-4 alkylamino, etc.; m = 0, 1], their pharmacol. acceptable salts, and hydrates, useful as immunosuppressants, anti-inflammatory agents, antiallergy agents, anticancer agents, and nerve disorder-treating agents, are prepared by amidation of ANR1[CHR2CONH]mCHR3CO2H (A, R1-R3, m = same as above) with H2NCHER4C.tplbond.CCOR5 (R4, R5 = same as above), followed by optional hydrolysis and further chemical modification. H2NCHER4C.tplbond.CCOR5 (R4, R5 = same as above) are prepared by amidation of BocHNCHER4C.tplbond.CCO2H (R4, R5 = same as above) with HNR6R7 (R6 = H, Cl-4 alkyl; R7 = Cl-4 alkyl, MeO; R6R7 may form morpholino), and hydrolysis or reaction with R8W (R8 = Cl-4 alkyl, Ph; W = Li, MgBr, MgCl) and hydrolysis. Thus, 550 mg (S)-BocNHCH(CH2Ph)C.tplbond.CCO2H (sic) was deprotected with CF3CO2H and amidated with 122 mg Z-L-Leu-L-Phe-OH to afford 135 mg Z-L-Leu-L-Phe-NHCH(CH2Ph)C.tplbond.CCO2Et. IT 427881-69-4P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (Preparation of alkynylamino acids as selective immunoproteasome inhibitors) RN 427881-69-4 HCAPLUS CN 2-Pentynoic acid, 4-[[[(2S)-2-[[[(1,1'-biphenyl]-4-ylcarbonyl)amino]-1-oxo-3-phenylpropyl]amino]-5-phenyl-, ethyl ester, (4S)- (9CI) (CA INDEX NAME) | | | | |

Absolute stereochemistry.

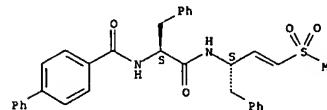
L4 ANSWER 79 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN (Continued)



L4 ANSWER 80 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 2002:378541 HCAPLUS
 DOCUMENT NUMBER: 136:386402
 TITLE: Preparation of alkenylamino acids as proteasome inhibitors
 INVENTOR(S): Kono, Yasushi; Ando, Naoki; Sawada, Takayuki; Kudo, Shinji; Kuriyama, Kazuhiko; Iwanami, Akira
 PATENT ASSIGNEE(S): Kyorin Pharmaceutical Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-------------------|----------|
| JP 2002145848 | A2 | 20020522 | JP 2000-343930 | 20001110 |
| PRIORITY APPLN. INFO.: | | | JP 2000-343930 | 20001110 |
| OTHER SOURCE(S): | | | MARPAT 136:386402 | |
| AB A[NR1CHR2CO]mNHCHR3CONHCHER4CH:CR5R6 [A = Z, Boc, RCO, R(CO)2, RSO2; R = (un)substituted Ph, (un)substituted PhCH2, (un)substituted styryl, etc.; R1 = H; R1R2 may be linked to form pyrrolidine ring; R2-R4 = H, (un)substituted Cl-4 alkyl, cyclohexylmethyl, (un)substituted PhCH2, etc.; R5 = H, F, Cl-4 alkoxy, carbonyl, CO2H, cyano, phenylsulfonyl, etc.; m = 0, 1], their pharmacol. acceptable salts, and their hydrates, useful as immunosuppressants, anti-inflammatory agents, antiallergy agents, anticancer agents, and nerve disorder-treating agents, are prepared by condensation of A[NR1CHR2CO]mNHCHR3CONHCHER4COH (A, R1-R4, m = same as above) with R7CHR8PO(OEt)2 (R7 = H, F; R8 = Cl-4 alkoxy, carbonyl, CO2H, Cl-4 alkoxyphosphoryl, cyano, etc.) or R9CH2CO2Ra (R9 = Cl-4 alkoxy, carbonyl; Ra = Cl-4 alkyl), followed by optional hydrolysis and further chemical modification. Thus, 150 mg MeSO2CH2PO(OEt)2 was treated with NaH in THF at room temperature for 1 h and condensed with 300 mg Z-L-Leu-L-Phe-L-Phe-H to give 89 mg Z-L-Leu-L-Phe-NH-L-CH(CH2Ph)CH:CHSO2Me, which inhibited proteasome with IC50 value of 0.14 μ g/mL. IT 428512-02-1P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (Preparation of alkenylamino acids as proteasome inhibitors) RN 428512-02-1 HCAPLUS CN [1,1'-Biphenyl]-4-carboxamide, N-[(1S)-2-[[[(1S)-3-(methylsulfonyl)-1-(phenylmethyl)-2-propenyl]amino]-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME) | | | | |

Absolute stereochemistry.
 Double bond geometry unknown.



L4 ANSWER 80 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

L4 ANSWER 81 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2002:251292 HCAPLUS
 DOCUMENT NUMBER: 137:211058
 TITLE: Exploration of the DTrp-NMeLys Motif in the Search for potent somatostatin antagonists
 AUTHOR(S): Rajeswaran, W. G.; Murphy, William A.; Taylor, John E.; Coy, David H.
 CORPORATE SOURCE: Department of Medicine, SL 53, Peptide Research Labs, Tulane University Health Sciences Center, New Orleans, LA, 70112, USA
 SOURCE: Bioorganic & Medicinal Chemistry (2002), 10(6), 2023-2029
 CODEN: BMECEP; ISSN: 0968-0896
 PUBLISHER: Elsevier Science Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Previous studies from this laboratory demonstrated that N-methylation at Lys5

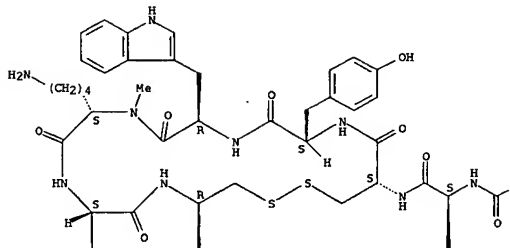
residue in somatostatin octapeptide antagonist analogs increased the GH release inhibition potency by as much as 300%. The authors have now further investigated N-methylation of this Lys5 residue in conjunction with a number of N- and C-terminal modifications previously found to give highly potent somatostatin receptor antagonists. Synthetic analogs were tested in a functional assay for their ability to inhibit somatostatin-inhibited GH release from rat pituitary cells in culture and to displace ¹²⁵I-labeled somatostatin from CHO cells transfected with the five known human somatostatin receptors. Several interesting observations resulted from the study. Replacement of lipophilic Nal8 at the C-terminus with a hydrophilic His8 resulted in the increased affinity and selectivity for type 2 receptor to give the most potent antagonist analog yet discovered (K_i, 1.5 nM), although in the rat pituitary cells inhibitory activity on somatostatin inhibited GH release decreased somewhat. A His3 substitution within the cyclic portion of the analogs retained pituitary cell potency and affinity for type 2 receptor as did substitution with Bip8 and Fpal. Replacement of Cpal with Iph1 did not effect the affinity for type 2 receptor significantly, but did decrease the effects on rat cell GH release. Iph3 within-ring substitution increased the selectivity for sst2 appreciably although the affinity for that receptor was considerably decreased. Substitution of Npa3 resulted in good selectivity for sst2 receptor. Replacement of Nal8 with D-Trp8 also increased the selectivity for type 2 receptor. Use of a 'bivalent ligand' approach in which two peptides were joined by 4,4'-biphenyldicarbonyl as a spacer destroyed the affinity for all the subtypes, however, the bivalent ligand formed with the Ahp spacer displayed significant affinity and high selectivity for the type 2 receptor.

IT 455333-39-8P
 RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (exploration of DTrp-NMeLys motif in search for potent human somatostatin receptor antagonists)
 RN 455333-39-8 HCAPLUS
 CN L-Alaninamide, 1,1'-([1,1'-biphenyl]-4,4'-diyldicarbonyl)bis[4-chloro-L-phenylalanyl-D-cysteinyl-L-tyrosyl-D-tryptophyl-N2-methyl-L-lysyl-L-threonyl-L-cysteinyl-3-(2-naphthalenyl)-, cyclic (2-7), (2'-7')-bis(disulfide) (9CI) (CA INDEX NAME)

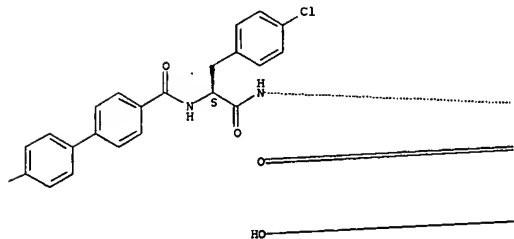
Absolute stereochemistry.

L4 ANSWER 81 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

PAGE 1-A

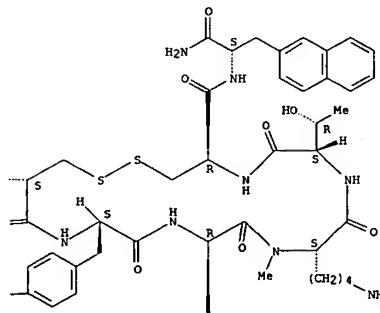


PAGE 1-B

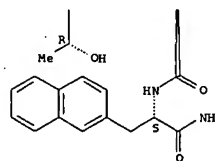


L4 ANSWER 81 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

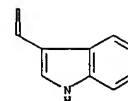
PAGE 1-C



PAGE 2-A



PAGE 2-C



REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

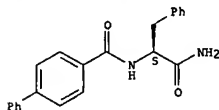
L4 ANSWER 82 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 2002:175704 HCAPLUS
 DOCUMENT NUMBER: 137:201104
 TITLE: Multipin solid-phase synthesis of biaryls via Suzuki cross coupling reaction of aryltriflates
 Lutz, Christian; Bleicher, Konrad H.
 CORPORATE SOURCE: Pharma Research, F. Hoffmann-La Roche AG, Basel, CH-4070, Switzerland.
 SOURCE: Tetrahedron Letters (2002), 43 (12), 2211-2214
 CODEN: TELEAV; ISSN: 0040-4039
 PUBLISHER: Elsevier Science Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 137:201104

AB A general method for the triflation of phenols on multipin solid supports (Rink-MA/DMA polyethylene-grafted crown ether derivs.; SynPhase-MD crowns from Chiron Technologies, Melbourne, Australia) followed by Suzuki cross coupling reaction with aryl boronic acids was developed. This methodol. was extended to the arylation of tyrosine containing peptides. The triflate derivs. used in this synthetic method were multipin-crown-supported N-[[4-[[trifluoromethyl)sulfonyl]oxy]benzoyl]-L-phenylalaninamide and N-[[3-[[trifluoromethyl)sulfonyl]oxy]benzoyl]-L-phenylalaninamide. Multipin-crown-supported [(trifluoromethyl)sulfonyl]tyrosinyl-L-phenylalaninamide derivs. and analogs, i.e., N-[2-[[1,1-dimethylethoxy]carbonyl]amino]-1-oxo-3-[[[(trifluoromethyl)sulfonyl]oxy]phenyl]propyl]-L-phenylalaninamide, and N-[2-[[1,1-dimethylethoxy]carbonyl]amino]-1-oxo-3-[[[(trifluoromethyl)sulfonyl]oxy]phenyl]propyl]-L-phenylalaninamide were prepared starting from N-[[1,1-dimethylethoxy]carbonyl]-3-[(2-propenyl)oxy]phenylalanine and N-[[1,1-dimethylethoxy]carbonyl]-O-2-propenyltyrosine, resp., and 1,1,1-trifluoro-N-phenyl-N-[(trifluoromethyl)sulfonyl]methanesulfonamide. 452940-51-1P

IT RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of polymer-bound N-(arylbenezoyl)-L-phenylalaninamide derivs. via Suzuki coupling of arylboronic acids with multipin crown-supported N-[[[(trifluoromethyl)sulfonyl]oxy]benzoyl]-L-phenylalaninamide derivs.)

RN 452940-51-1 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-[(1S)-2-amino-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

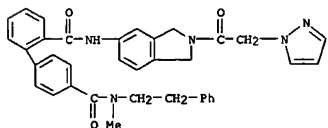
Absolute stereochemistry.



REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 83 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN (Continued)
 (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of biphenylcarboxamidoisindoline derivs. as apolipoprotein B secretion inhibitors)

RN 400726-20-7 HCAPLUS
 CN [1,1'-Biphenyl]-2,4'-dicarboxamide, N2-[2,3-dihydro-2-(1H-pyrazol-1-yl)acetyl]-1H-isindol-5-yl-N4'-methyl-N4'-(2-phenylethyl)- (9CI) (CA INDEX NAME)

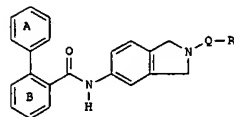


REFERENCE COUNT: 77 THERE ARE 77 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 83 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 2002:142672 HCAPLUS
 DOCUMENT NUMBER: 136:200094
 TITLE: Preparation of biphenylcarboxamidoisindoline derivatives as apolipoprotein B secretion inhibitors
 Yamada, Harutami; Ando, Akira; Kawanishi, Hiroyuki; Nagata, Koichi; Yasuhara, Mikiko
 SOURCE: Tanabe Sellyaku Co., Ltd., Japan
 PCT Int. Appl., 149 pp.
 CODEN: PIKX02
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2002014277 | A1 | 20020221 | WO 2001-JP6844 | 20010809 |
| W: AE, AG, AL, AU, BA, BB, BG, BR, BZ, CA, CN, CO, CR, CU, CZ, DM, DZ, EC, EE, GE, GR, HR, HU, ID, IL, IN, IS, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2001077728 | A5 | 20020225 | JP 2001-77728 | 20010809 |
| JP 2003055345 | A2 | 20030226 | JP 2001-241482 | 20010809 |
| PRIORITY APPLN. INFO.: | | | JP 2000-243004 | A 20000810 |
| | | | JP 2001-172918 | A 20010607 |
| | | | WO 2001-JP6844 | W 20010809 |

OTHER SOURCE(S): MARPAT 136:200094
 GI



AB The title compds. I [ring A is a substituted or unsubstituted benzene ring; ring B is a substituted or unsubstituted benzene ring; Q is CO or CH2; and R is substituted or unsubstituted lower alkyl, substituted or unsubstituted lower alkenyl, substituted or unsubstituted carbamoyl, a substituted or unsubstituted heterocyclic group, substituted or unsubstituted aryl, or the like], useful as apolipoprotein B secretion inhibitors (no data), are prepared. Processes for the preparation of I are claimed. For example, 2-(2-pyridyl)acetyl-5-[2-(4-trifluoromethylphenyl)benzoylamino]isindoline was prepared 400726-20-7P

IT RL: IMF (Industrial manufacture); PAC (Pharmacological activity); SPN

L4 ANSWER 84 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 2002:63493 HCAPLUS
 DOCUMENT NUMBER: 136:112635
 TITLE: Biphenyl sulfamates as steroid sulfatase inhibitors for estrogen-dependent diseases
 Jinbo, Yoshikazu; Miyasaka, Tomohiro; Inoue, Yoshimasa
 SOURCE: Japan Organo Co., Ltd., Japan
 Jpn. Kokai Tokkyo Koho, 14 pp.
 CODEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| JP 2002020362 | A2 | 20020123 | JP 2000-245314 | 20000706 |
| PRIORITY APPLN. INFO.: | | | JP 2000-245314 | 20000706 |

OTHER SOURCE(S): MARPAT 136:112635

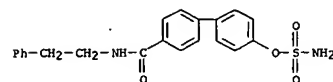
AB 4-RC6H4C6H4OSO2NH2-4 [I; R = CO2H, CONR1R2, CONR1OCH2Ph, COR2, C(OH)R1R2; R1 = H, (un)substituted alkyl; 2 = (un)substituted alkyl] are prepared I are useful for treatment of mammary cancer, endometrial cancer, endometriosis, uterine myoma, etc. I (R = COCH2C6H4CMe3-4) (preparation given)

Inhibited human placenta-derived steroid sulfatase at IC50 3.6 μM.

IT RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of biphenyl sulfamates as steroid sulfatase inhibitors for treatment of estrogen-dependent diseases)

RN 390358-17-5 HCAPLUS

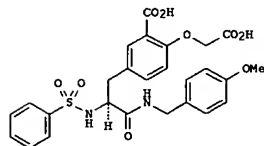
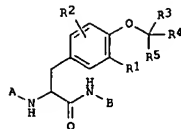
CN Sulfamic acid, 4'-[[2-(phenylethyl)amino]carbonyl][1,1'-biphenyl]-4-yl ester (9CI) (CA INDEX NAME)



L4 ANSWER 85 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2002:51425 HCAPLUS
 DOCUMENT NUMBER: 136:118266
 TITLE: Preparation and use of α -arylsulfonylamino- α -benzylcarboxamides as phosphatase inhibitors
 INVENTOR(S): Burgess, Laurence E.; Gaudino, John; Groneberg, Robert D.; Norman, Mark H.; Rodriguez, Martha E.; Sun, Xicheng; Wallace, Eli M.
 PATENT ASSIGNEE(S): Array Biopharma Inc., USA
 SOURCE: PCT Int. Appl., 77 pp.
 CODEN: PIXX02
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2002004412 | A2 | 20020117 | WO 2001-US41271 | 20010705 |
| WO 2002004412 | A3 | 20020822 | | |
| V: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TH, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KS, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2416220 | AA | 20020117 | CA 2001-2416220 | 20010705 |
| US 2002040003 | A1 | 20020404 | US 2001-899654 | 20010705 |
| US 6586467 | B2 | 20030701 | | |
| EP 1301474 | A2 | 20030416 | EP 2001-956161 | 20010705 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| JP 2004502754 | T2 | 20040129 | JP 2002-509079 | 20010705 |
| BR 2001012216 | A | 20040210 | BR 2001-12216 | 20010705 |
| NZ 523483 | A | 20040827 | NZ 2001-523483 | 20010705 |
| NO 2003000061 | A | 20030305 | NO 2003-61 | 20030106 |
| PRIORITY APPLN. INFO.: | | | US 2000-216201P | P 20000706 |
| | | | WO 2001-US41271 | W 20010705 |
| OTHER SOURCE(S): HARPAT 136:118266 | | | | |
| GI | | | | |

L4 ANSWER 85 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

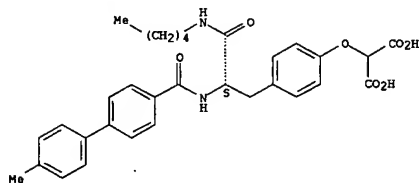


AB Title compds. I [R1 = H, OH, halo, amino, monoalkylamino, trifluoromethyl, aminomethyl, cyano, nitro, carboxy, (un)substituted heteroaryl; R2 = H, OH, halo, alkyl, alkoxy, alkoxyalkyl, hydroxyalkyl, alkenyl, amino, mono- or dialkylamino, cyano, nitro, trifluoromethyl, carboxy, carbamido, (hetero)aryl; R3-5 = H, OH, halo, alkenyl, cycloalkyl, CN, carboxy, carbamido, (hetero)aryl; A = alk(en/yn)yl, acyl, S(O)2R7, C(O)NHR7, CO2R7, (CH2)nS(O)qR7, (CH2)pC(O)R7, (CH2)pC(O)NHR7, (CH2)pC(O)R7, (CH2)nOR7, (hetero)aryl; B = H, alk(en/yn)yl(CH2)nS(O)qR7, (CH2)pC(O)R7, (CH2)pC(O)NHR7, (CH2)pC(O)R7, (CH2)nOR7, aryl, heteroaryl, arylalkyl, arylalkenyl, arylalkynyl, heteroarylalkyl, heteroarylalkenyl, heteroarylalkynyl, etc.; n = 2-4; p = 1-2; q = 0-2; R7 = alkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl] were prepared. Over 50 synthetic examples were disclosed. For instance, (S)-3-iodotyrosine was converted to the N-Boc-O-benzyl derivative and converted to 5-((2S)-2-benzylloxycarbonyl-2-((tert-butoxycarbonyl)amino)ethyl)-2-(hydroxy)benzoic acid Me ester (CH3CN, PdAc2, dppe, Et3N, CO/1 atm, 68 °C). This phenol was O-alkylated with Me bromomethylacetate (acetone, K2CO3, 50 °C), debenzylated (EtOHaq, palladium hydroxide, H2-1 atm), coupled to 4-methoxybenzyl amine (CH2Cl2, EDC), treated with TFA (CH2Cl2), sulfonylated (PhSO2Cl, pyridine, 0 °C) and finally saponified (THFaq) to afford II. II and selected example compds. had Ki = 0.01 μ M - 1000 μ M for CDC25A phosphatase and PTP-1B. I are useful in the treatment or prevention of diabetes mellitus.

IT 399846-38-2P, 2-((4-((2S)-2-((4'-Methylbiphenyl-4-carbonyl)amino)-2-pentylcarbamoyl)ethyl)phenoxy)malonic acid
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (drug; preparation and use of α -arylsulfonylamino- α -

L4 ANSWER 85 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 RN 399846-38-2 HCAPLUS
 CN Propanedioic acid, [4-((2S)-2-((4'-methyl[1,1'-biphenyl]-4-yl)carbonyl)amino)-3-oxo-3-(pentylamino)propyl)phenoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

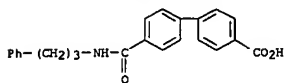


L4 ANSWER 86 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2001:870423 HCAPLUS
 DOCUMENT NUMBER: 136:167426
 TITLE: Universal Solid-Phase Approach for the Immobilization, Derivatization, and Resin-to-Resin Transfer Reactions of Boronic Acids
 AUTHOR(S): Gravel, Michel; Thompson, Kim A.; Zak, Mark; Ruben, Christian; Hall, Dennis G.
 CORPORATE SOURCE: Department of Chemistry, University of Alberta, Edmonton, AB, T6G 2G2, Can.
 SOURCE: Journal of Organic Chemistry (2002), 67(1), 3-15
 CODEN: JOCEAH; ISSN: 0022-3263
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 136:167426

AB Boronic acid-containing mols. are employed in a broad range of biol., medicinal, and synthetic applications. These compds., however, tend to be difficult to handle by solution-phase methods. Herein, this problem is addressed with the development of the first general solid-phase approach for the derivatization of functionalized boronic acids. This approach is based on the use of a diethanolamine resin anchor that facilitates boronic acid immobilization by avoiding the need for exhaustive removal of water in the esterification process. The immobilization of a wide variety of boronic acids onto N,N-diethanolaminomethyl polystyrene (DEAM-PS, 1) can be performed within minutes by simple stirring in anhydrous solvents at room temperature. Evidence for the formation of a bicyclic diethanolamine boronate with putative N-B coordination was shown by 1H NMR anal. of DEAM-PS-supported p-tolylboronic acid. The hydrolytic cleavage of the same model boronic acid from the DEAM-PS resin was studied by UV spectroscopy. Hydrolysis and attachment were shown to occur under a rapidly attained equilibrium, and a large excess of water (>32 equiv) is required to effect a practically quant. release of boronic acids from DEAM-PS. Despite their relative sensitivity to water and alcs., DEAM-PS-bound arylboronic acids functionalized with a formyl, a bromomethyl, a carboxyl, or an amino group can be transformed in good to excellent yields into a wide variety of amines, amides, anilides, and ureas, resp. Ugi multicomponent reactions on DEAM-PS-supported aminobenzeneboronic acids, derivatization of multifunctional arylboronic acids, and sequential reactions can also be carried out efficiently. These new DEAM-PS-supported arylboronic acids can be employed directly into resin-to-resin transfer reactions (RTR). This type of multiresin process helps eliminate time-consuming cleavage and transfer operations, thereby considerably simplifying the outlook of combinatorial library synthesis by manual or automated means. This concept was illustrated by a set of optimized procedures for the Suzuki cross-coupling and the borono-Mannich reactions.

IT 397843-95-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (immobilization of arylboronic acids with diethanolaminomethyl polystyrene, and subsequent reactivity of the polymer supported compds.)
 RN 397843-95-7 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxylic acid, 4'-((3-phenylpropyl)amino)carbonyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 86 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



REFERENCE COUNT: 111 THERE ARE 111 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 87 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:863510 HCAPLUS

DOCUMENT NUMBER: 136:5913

TITLE: Preparation of substituted N-[(aminoiminomethyl or aminomethyl)phenyl]propyl amides as Factor Xa inhibitors

INVENTOR(S): Klein, Scott I.; Guertin, Kevin R.; Spada, Alfred P.;

Pauls, Heinz W.; Gong, Yong; McGarity, Daniel G.

PATENT ASSIGNEE(S): Aventis Pharmaceuticals Products Inc., USA

SOURCE: U.S., 131 pp., Cont.-in-part of U.S. Ser. No. 884,405.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|----------|
| US 6323227 | B1 | 20011127 | US 1999-259528 | 19990226 |
| US 6080767 | A | 20000627 | US 1997-884405 | 19970627 |
| WO 9900356 | A1 | 19990107 | WO 1998-US13550 | 19980626 |

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LX, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TH, TR, TT, UA, UG, US, UZ, VN, YU, ZW

RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

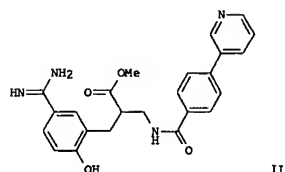
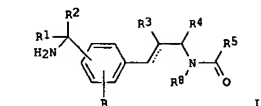
PRIORITY APPLN. INFO.:

| | | |
|-----------------|----|----------|
| US 1996-9485P | P | 19960102 |
| US 1997-884405 | A2 | 19970627 |
| WO 1998-US13550 | A1 | 19980626 |
| WO 1996-US20770 | A2 | 19961223 |

OTHER SOURCE(S): MARPAT 136:5913

GI

L4 ANSWER 87 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



AB Title compds. I [R = H, OH, NH2; R1 = R2 = H; or R1R2 = :NR9; R3 = H, CO2R6, COR6, CON(R6)2, CH2OR7, CH2SR7; R4 = H, alkyl, alkyl-Q, thioheterocyclyl, (CH2CH2)nAr, (CH3CH)nAr, CH2Ar; R5 = alk(en/yn)yl, cycloalk(en)yl, heterocycl(en)yl, aryl, heteroaryl, fused systems, etc.; R6 = H, lower alkyl; R7 = H, lower alkyl, aralkyl, lower acyl, aroyl, heteroaryl; R8 = H, lower alkyl; R9 = H, R1002C, R100, HO, cyano, R10CO, OHC, lower alkyl, O2N, Y1'Y2'N; R10 = alkyl, aralkyl, heteroalkyl; Y1', Y2' = H, alkyl; Q = R70, R75, Y1Y2N; Y1, Y2 = H, alkyl, aryl, aralkyl; or one of Y1 and Y2 = acyl or aroyl and the other is as given; Ar = aryl or heteroaryl; n = 0-2] and their pharmaceutically acceptable salts, prodrugs, N-oxides, hydrates, and solvates are useful as Factor Xa inhibitors. For example, 4-(pyridin-3-yl)benzoic acid was amidated with tert-Bu 3-aminopropionate-HCl via the acid chloride, and the resulting β -acylamino ester underwent a sequence of (1) α -alkylation with 5-iodo-2-[(2-methoxyethoxy)methoxy]benzyl bromide, (2) acidic deprotection of the MEM group, and conversion to the Me ester, (3) Pd-catalyzed cyanation of the iodide, and (4) Pinner reaction and ammonolysis of the nitrile, to give title compound II. Three example compds. showed Ki values of 19.0-94.0 nM in a Factor Xa assay, 46 nM to 1.72 μ M in a trypsin assay, and 477 nM to 2.71 μ M in a thrombin assay.

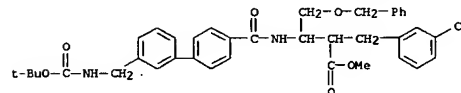
IT 219671-21-3

RL: RCT (Reactant); RACT (Reactant or reagent)
(intermediate; preparation of substituted [(aminoiminomethyl)- or (aminomethyl)phenyl]propyl amides as Factor Xa inhibitors)

RN 219671-21-3 HCAPLUS

CN Benzenepropanoic acid, 3-cyano- α -[1-[[[3'-[[[(1,1-dimethylethoxy)carbonyl]amino]methyl][1,1'-biphenyl]-4-yl]carbonyl]amino]-2-(phenylmethoxy)ethyl]-, methyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 87 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

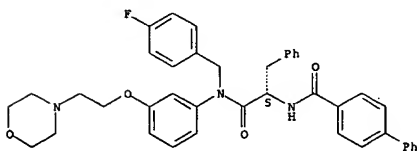


REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

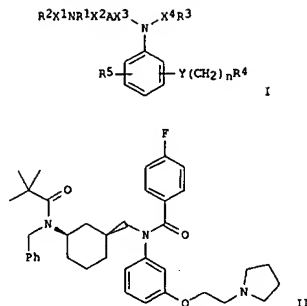
L4 ANSWER 88 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2001:833284 HCAPLUS
 DOCUMENT NUMBER: 135:371641
 TITLE: Preparation of arylheterocyclamides as motilin antagonists
 INVENTOR(S): Johnson, Sigmond G.; Rivero, Ralph A.
 PATENT ASSIGNEE(S): Ortho-McNeil Pharmaceutical, Inc., USA
 SOURCE: PCT Int. Appl., 132 pp.
 CODEN: F1XXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|-------------|
| WO 2001085694 | A2 | 20011115 | WO 2001-US11821 | 20010411 |
| WO 2001085694 | A3 | 20020404 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GM, GW, ML, MR, NE, SN, TD, TG | | | |
| US 2002013352 | A1 | 20020131 | US 2001-829767 | 20010410 |
| US 6511980 | B2 | 20030128 | | |
| CA 2408288 | AA | 20011115 | CA 2001-2408288 | 20010411 |
| EP 1294695 | A2 | 20030326 | EP 2001-926866 | 20010411 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| JP 2003532710 | T2 | 20031105 | JP 2001-582295 | 20010411 |
| BG 107243 | A | 20030731 | BG 2002-107243 | 20021101 |
| US 2003203906 | A1 | 20031030 | US 2002-291133 | 20021108 |
| US 6967199 | B2 | 20051122 | | |
| US 2005148584 | A1 | 20050707 | US 2005-66202 | 20050225 |
| PRIORITY APPLN. INFO.: | | | US 2000-202131P | P 20000505 |
| | | | US 2001-829767 | A3 20010410 |
| | | | WO 2001-US11821 | W 20010411 |
| | | | US 2002-291133 | A3 20021108 |
| OTHER SOURCE(S): | MARPAT 135:371641 | | | |
| GI | | | | |

L4 ANSWER 88 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



L4 ANSWER 88 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



AB Title compds. [I: R1 = H, (substituted) aryl, aralkyl, heterocyclyl, diarylalkyl, alkyl, etc.; R2 = (substituted) aryl, aralkyl, cycloalkyl, heterocyclyl, heterocyclylalkyl, etc.; X1-X4 = null, CO, SO2; R1NR2X1 = (substituted) heterocyclyl; A = (substituted) alkyl, alkenyl, cycloalkyl, cycloalkylalkyl, etc.; Y = O, NH, S, SO2; n = 0-5; R4 = H, amino, alkylamino, dialkylamino, heterocyclyl, alkylheterocyclyl, etc.], were prepared. Thus, N-[3-[2-(1-pyrrolidino)ethoxy]phenyl]-N-(cis-3-painocyclohexyl)methyl-4-fluorophenylcarboxamide (preparation given) and PhCHO in PhMe were treated sequentially with Ti(OiPr)4; EtOH, and NaBH(OAc)3 to give a crude residue which in CH2Cl2 was treated with Me3CCOCl to give title compound (II). II inhibited motilin-induced contraction in rabbit colon with IC50 = 0.029 µM.

IT 373822-38-9P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPW (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of arylheterocyclamides as motilin antagonists)

RN 373822-38-9 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-[(1S)-2-[[4-(4-fluorophenyl)methyl][3-[2-(4-morpholinyl)ethoxy]phenyl]amino]-2-oxo-1-(phenylmethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 89 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2001:796285 HCAPLUS
 DOCUMENT NUMBER: 135:339262
 TITLE: Somatostatin antagonists and agonists that act at the SST subtype 2 receptor
 INVENTOR(S): Cole, Bridget McCarthy; Hay, Bruce Allan; Ricketts, Anthony Paul
 PATENT ASSIGNEE(S): Pfizer Products Inc., USA
 SOURCE: Eur. Pat. Appl., 32 pp.
 CODEN: EPXKDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|-------------|
| EP 1149842 | A2 | 20011031 | EP 2001-303553 | 20010419 |
| EP 1149842 | A3 | 20020731 | | |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | |
| US 2001047030 | A1 | 20011129 | US 2000-734789 | 20010212 |
| US 6495589 | B2 | 20021217 | | |
| CA 2345569 | AA | 20011028 | CA 2001-2345569 | 20010426 |
| BR 2001001674 | A | 20011204 | BR 2001-1674 | 20010427 |
| JP 2002003498 | A2 | 20020109 | JP 2001-134360 | 20010501 |
| US 2005054581 | A1 | 20050310 | US 2001-997479 | 20011116 |
| PRIORITY APPLN. INFO.: | | | US 2000-200319P | P 20000428 |
| | | | US 2000-734789 | A1 20010212 |

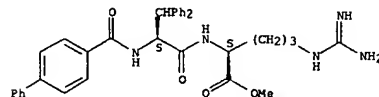
OTHER SOURCE(S): MARPAT 135:339262

AB The invention discloses compds. A-G-Z-W [A = (C6-C10)aryl, (C6-C10)aryl-SO2, (C6-C10)aryl-CH2-, etc.; G = BX (B = (C6-C10)aryl, (C1-C9)heteroaryl; X = CH2, SO2, carbonyl); NHC(R1)(R1')X (X = CH2, SO2, carbonyl; R1, R1' = H, CN, (C1-C8)alkyl, phenyl(CH2), wherein alkyl and Ph groups are optionally substituted, etc.; Z, V as defined in specification); and pharmaceutically acceptable salts, solvates or hydrates thereof, as well as pharmaceutical compns. and methods useful to increase secretion of growth hormone from the anterior pituitary of mammals, including on a sustained-release basis. Compound preparation is described.

IT 371112-30-0DP, stereoisomers
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPW (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (somatostatin antagonists and agonists that act at the SST subtype 2 receptor)

RN 371112-30-0 HCAPLUS
 CN L-Arginine, N-[(1,1'-biphenyl)-4-ylcarbonyl]-β-phenyl-L-phenylalanyl-, methyl ester (9CI) (CA INDEX NAME)

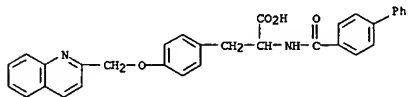
Absolute stereochemistry.



L4 ANSWER 89 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

L4 ANSWER 90 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

IT 353798-80-8P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 RN 353798-80-8 HCAPLUS
 CN Tyrosine, N-([1,1'-biphenyl]-4-ylcarbonyl)-O-(2-quinolinylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 90 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:597979 HCAPLUS

DOCUMENT NUMBER: 135:167035

TITLE: Preparation of tyrosine derivatives having anti-leukotriene activity

INVENTOR(S): Makovec, Francesco; Peris, Walter; Rovati, Lucio Claudio

PATENT ASSIGNEE(S): Rotta Research Laboratories S.P.A., Italy

SOURCE: PCT Int. Appl., 27 pp.

DOCUMENT TYPE: CODEN: PIXXD2

LANGUAGE: Patent

FAMILY ACC. NUM. COUNT: 1 English

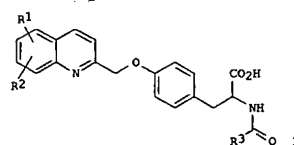
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2001058892 | A1 | 20010816 | WO 2001-EP1315 | 20010207 |
| W: AU, CA, JP, US | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR | | | | |
| IT 1320162 | B1 | 20031118 | IT 2000-T0127 | 20000209 |
| CA 2399451 | AA | 20010816 | CA 2001-2399451 | 20010207 |
| EP 1255749 | A1 | 20021113 | EP 2001-905744 | 20010207 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| JP 2003522768 | T2 | 20030729 | JP 2001-558442 | 20010207 |
| AU 776214 | B2 | 20040902 | AU 2001-33742 | 20010207 |
| US 2003087910 | A1 | 20030508 | US 2002-203424 | 20020808 |
| US 6605722 | B2 | 20030812 | | |

PRIORITY APPLN. INFO.:

OTHER SOURCE(S): MARPAT 135:167035

GI



AB Comps. I [R1, R2 = H, C1-4 alkyl, halo, MeO, cyano, CF3; R3 = (un)substituted Ph, pyridyl or (iso)quinolinyl, 1- or 2-naphthyl, 2- or 3-indolyl or N-alkyl derivs., 2-, 5- or 6-quinowalyl, cinnolyl, benzimidazolyl], which may have the L- or D-configuration or be racemic, were prepared and are useful in the treatment of pathol. conditions sensitive to leukotriene inhibition. Thus, O-(2-quinolinylmethyl)-N-quinolaldehyde-DL-tyrosine was prepared by acylation of DL-tyrosine Me ester with quinaldic acid, O-alkylation with 2-chloromethylquinoline

L4 ANSWER 91 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:581832 HCAPLUS

DOCUMENT NUMBER: 135:166842

TITLE: Preparation of (1H-indol-5-yl)methanones, 2-(2-fluorophenyl)acetamides and 2-(pyrazol-1-yl)pyrimidines as Inha inhibitors

INVENTOR(S): Staveski, Mark M.; Sneddon, Scott F.; Yee, Christopher; Janjigian, Andrew

PATENT ASSIGNEE(S): Genzyme Corporation, USA

SOURCE: PCT Int. Appl., 56 pp.

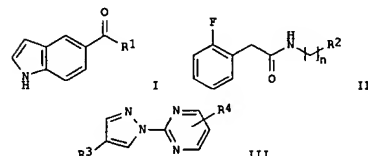
DOCUMENT TYPE: CODEN: PIXXD2

LANGUAGE: Patent

FAMILY ACC. NUM. COUNT: 1 English

PATENT INFORMATION:

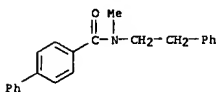
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|-------------|
| WO 2001056974 | A2 | 20010809 | WO 2001-US40045 | 20010206 |
| WO 2001056974 | A3 | 20020718 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TH, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, BG, BR, BS, CA, CH, CN, CU, CY, CZ, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 6372752 | B1 | 20020416 | US 2000-499183 | 20000207 |
| PRIORITY APPLN. INFO.: | | | US 2000-499183 | A1 20000207 |
| OTHER SOURCE(S): MARPAT 135:166842 | | | | |
| GI | | | | |



AB The title compts. [I-III, etc.; R1 = (un)substituted heteroaryl, piperazinyl, piperidinyl, etc.; R2 = OH, (un)substituted aryl, cycloalkyl, etc.; n = 1-2; R3 = (un)substituted Ph, heteroaryl; R4 = H, halo, alkyl, etc.] which inhibit the Mycobacterial enoyl-ACP reductase required for cell wall biosynthesis, and are useful for treating a bacterial infection in a patient, were prepared Thus, reacting 2-fluorophenylacetic acid with 4-chlorophenethylamine in the presence of DMAP and EDCl in CH2Cl2 afforded II [R2 = 4-ClC6H4; n = 2] which showed 82% Inha inhibition at 40 μM.

IT 353522-43-7P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological

L4 ANSWER 91 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
 BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of (1H-indol-5-yl)methanones, 2-(2-fluorophenyl)acetamides and
 2-(pyrazol-1-yl)pyrimidines as InHA inhibitors)
 RN 353522-43-7 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-methyl-N-(2-phenylethyl)- (9CI) (CA
 INDEX NAME)

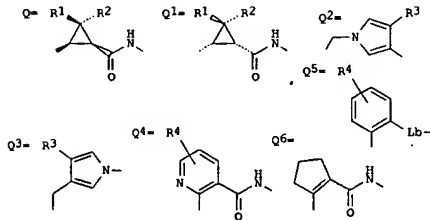


L4 ANSWER 92 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2001:565039 HCAPLUS
 DOCUMENT NUMBER: 135:153111
 TITLE: Preparation of aryl-amidines and derivatives, and
 prodrugs thereof as factor Xa inhibitors
 INVENTOR(S): Kang, Myung-Gyun; Park, Doo-Hee; Kwon, Oh-Hwan; Kim,
 Eunice Eun-Kyeong; Hwang, Kwang-Yeon; Ha, Yong-Seok;
 Park, Tae-Kyoo; Lee, Tae-Hee; Moon, Kwang-Yul; Park,
 Jong-Woo; Chang, Hye-Kyung; Lee, Sang-Koo; Lee,
 Sun-Hwa; Park, Su-Kyung; Lee, Sung-Hack; Park,
 Hee-Dong
 PATENT ASSIGNEE(S): LG Chem Investment Ltd., S. Korea
 SOURCE: PCT Int. Appl., 177 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2001055146 | A1 | 20010802 | WO 2001-KR13 | 20010104 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LX, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| KR 2001076973 | A | 20010817 | KR 2000-4458 | 20000129 |
| KR 2001081202 | A | 20010829 | KR 2000-6354 | 20000211 |
| KR 2001081598 | A | 20010829 | KR 2000-7487 | 20000217 |
| KR 2001081600 | A | 20010829 | KR 2000-7489 | 20000217 |
| EP 1254136 | A1 | 20021106 | EP 2001-901571 | 20010104 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | |
| JP 2003523356 | T2 | 20030805 | JP 2001-561005 | 20010104 |
| US 2003065176 | A1 | 20030403 | US 2002-181975 | 20020724 |
| KR 2002070385 | A | 20020906 | KR 2002-709662 | 20020726 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | KR 2000-4458 | A 20000129 |
| | | | KR 2000-6354 | A 20000211 |
| | | | KR 2000-7487 | A 20000217 |
| | | | KR 2000-7489 | A 20000217 |
| | | | WO 2001-KR13 | W 20010104 |

OTHER SOURCE(S): MARPAT 135:153111
 GI

L4 ANSWER 92 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



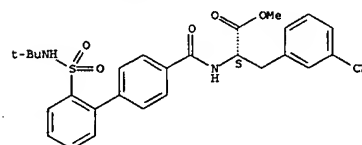
AB The aryl-amidines, particularly amidinoaryl-cyclopropanes, amidinoarylmethyl-pyrroles, amidinoaryl-benzenes, amidinoaryl-pyridines, or amidinoaryl-alanines, represented by formula G-A(D)-A-L-P[(X)n]-Q(Y)Z [wherein Ar = benzene, pyridine, thiophene, naphthalene, isoquinoline, G = R, F, Cl, Br, iodo, cyano, OR, O2CR, CO2R, CONR2 (wherein R = H, linear, branched, cyclic or branched cyclic C1-10 alkyl); A = Q-Q6, CH2 CHR5CONH, CH2CHR5CH2O, CH2CHR5NHCO (wherein R1, R2 = F, Cl, Br, iodo, R, CH2O R, CH2O2CR, CO2R, CONR2, CON(CH2)m (m = 2-7), CO-morpholine, etc.; R3 = group listed in R2, CONH(amino acid or its ester or amide), etc.; R4 = F, Cl, Br, iodo, cyano, OR, R5 = NR2, NR(COR), NR (CH2)m1 CO2R (m1 = 0-3), etc.; R6 = CO2R, CONR2, CH2OR]; Lb = CONH, CONHCH2, CH2NHCO, NHCONH, etc.; D = NH2, CH2NH2, C(=NR7)NH2 (wherein R7 = H, OH, CO2R8, OR8, O2COR8; wherein R8 = Ph, CH2Ph, linear, branched, cyclic or branched cyclic C1-10 alkyl); L = (CH2)m2 (m2 = 0,1); P = benzene, pyridine, pyrrole, furan, thiophene, oxazole, isoxazole, imidazole, 1,2-diazole, thiazole, isothiazole, pyridazine, pyridazine, pyrimidine, pyrazine, naphthalene, etc.; n = 0-2; Q = H, benzene, pyridine, pyridine, pyrrole, furan, thiophene, oxazole, isoxazole, imidazole, 1,2-diazole, thiazole, isothiazole, etc.; Y, Z = R, F, Cl, Br, iodo, cyano, OR, CO2R, COR, CONR2, NR2, NR(COR), N(COR)2, CF3, OCF3, etc.], pharmaceutically acceptable salts, prodrugs, hydrates, solvates or isomers thereof are prepared. These compds. are inhibitors of coagulation enzyme, factor Xa (FXa). The present invention also relates to a pharmaceutical composition containing the above compound, and a method of using the same as an anticoagulant agent for treatment and prevention of thrombosis disorders. N-(4-(2-aminosulfonylphenyl)phenyl)-cis-2-(3-aminoininomethylphenyl)cyclopropane-1-carboxamide monotrifluoroacetate, 4-(4-aminoininomethylbenzyl)-1-(3-aminoininomethylbenzyl)pyrrole-3-carboxamide bis(trifluoroacetate), 3-aminoininomethylbenzyl 2-(3-aminoininomethylphenyl)benzyl ether bis(trifluoroacetate), and (S)-N-(4-(2-aminosulfonylphenyl)benzoyl)-3-(3-aminoininomethylphenyl)alanine Et ester trifluoroacetate in vitro inhibited FXa with Ki of 0.5, 0.12, 0.44, and 2 nM, resp., and thrombin with Ki of 2,900, 2.1, 5, and 620, resp., and exhibited the thrombin/FXa selectivity of 5,800, 18, 11, and 310, resp.

IT 352617-39-1P
 R1: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (intermediate preparation of aryl-amidines and derivs., and prodrugs thereof as factor Xa inhibitors and anticoagulants for treatment of

L4 ANSWER 92 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 352617-39-1 HCAPLUS
 CN L-Phenylalanine, 3-cyano-N-[[2'-[[[(1,1-dimethylethyl)amino]sulfonyl][1,1'-biphenyl]-4-yl]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



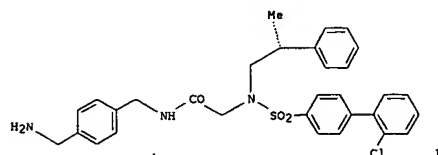
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 93 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2001:534606 HCAPLUS
 DOCUMENT NUMBER: 135:266639
 TITLE: The first potent and selective inhibitors of the glycine transporter type 2
 AUTHOR(S): Caulfield, Wilson L.; Collie, Iain T.; Dickens, Rachel S.; Epemolu, Olu; McGuire, Ross; Hill, David R.; McVey, Gillian; Morphy, J. Richard; Rankovic, Zoran; Sundaram, Hardy
 CORPORATE SOURCE: Lead Discovery Unit, Organon Laboratories Ltd., Newhouse, ML1 5SH, UK
 SOURCE: Journal of Medicinal Chemistry (2001), 44(17), 2679-2682
 CODEN: JMCMAR; ISSN: 0022-2623
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 135:266639
 AB Glycine is one of the major inhibitory neurotransmitters in the spinal cord and brain stem of vertebrates. The inhibitory actions of glycine are mediated by the strychnine-sensitive glycine receptor, a ligand-gated chloride channel distributed throughout the spinal cord and brain stem. Glycine is also known to potentiate the action of glutamate acting as an essential co-agonist on postsynaptic N-methyl-D-aspartate (NMDA) receptors. Synaptic levels of glycine are believed to be controlled by high-affinity glycine transporters. These transporters are members of a large family of sodium/chloride-dependent transporters, which are composed of single oligomeric proteins containing 12 hydrophobic membrane-spanning domains. There is evidence that glycine-mediated inhibition produces muscle relaxation and blockade of this inhibition produces convulsions. Therefore, we postulated that modulators of endogenous levels of glycine might provide skeletal muscle relaxation. A significant amount of data has accumulated over recent years, indicating that glycine also has an important role in the modulation of nociceptive pathways. Thus, it was anticipated that an increase in synaptic levels of endogenous glycine by a selective inhibition of the GlyT-2 transporter in the spinal cord may offer a unique approach for developing a novel muscle relaxant, anesthetic, and/or analgesic reagent, suitable for use during surgical anesthesia. Due to the discrete localization of both sGlyR and the GlyT-2 transporter within the spinal cord and brain stem, a glycine modulator might not be expected to lead to serious CNS side effects that are characteristic for currently used μ -opioid analgesics. Since testing of this hypothesis has been hampered by the lack of a suitable GlyT-2 inhibitor, we sought a potent and selective inhibitor of the transporter that would enable us to conduct proof-of-principle studies. In summary, high-throughput screening of Organon's compound collection provided an attractive drug-like GlyT-2 inhibitor suitable for high-throughput synthesis. A detailed study of the SAR and rapid hit optimization were achieved through synthesis of a solution-phase 2D library. This led to identification of 4-benzyl-3,5-dimethoxy-N-[(1-dimethylaminocyclopentyl)methyl]benzamide, the first potent and selective GlyT-2 inhibitor.
 IT 363627-08-1P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (structure-activity relationship of selective glycine transporter type

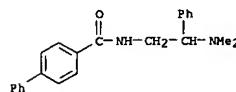
L4 ANSWER 94 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2001:489600 HCAPLUS
 DOCUMENT NUMBER: 135:92447
 TITLE: Synthesis of substituted aminoalkylamide derivatives as antagonists of follicle stimulating hormone
 INVENTOR(S): Coats, Steven J.; Hlasta, Dennis J.; Lantern, Carolina L.; Macielag, Mark J.; Rivero, Ralph; Fitzpatrick, Louis J.; Pan, Kevin
 PATENT ASSIGNEE(S): Ortho-McNeil Pharmaceutical, Inc., USA
 SOURCE: PCT Int. Appl., 182 pp.
 CODEN: PIXX2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|-------------|
| WO 2001047875 | A1 | 20010705 | WO 2000-0534730 | 20001221 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, BG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SO, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2395716 | AA | 20010705 | CA 2000-2395716 | 20001221 |
| US 2002058654 | A1 | 20020516 | US 2000-745283 | 20001221 |
| US 6583179 | B2 | 20030624 | | |
| EP 1244617 | A1 | 20021002 | EP 2000-986645 | 20001221 |
| EP 1244617 | B1 | 20050216 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| JP 2003519120 | T2 | 20030617 | JP 2001-549348 | 20001221 |
| AT 289293 | E | 20050315 | AT 2000-986645 | 20001221 |
| ES 2237482 | T3 | 20050801 | ES 2000-986645 | 20001221 |
| US 2004092505 | A1 | 20040513 | US 2003-412860 | 20030414 |
| PRIORITY APPLN. INFO.: | | | US 1999-173139P | P 19991227 |
| | | | US 2000-745283 | A3 20001221 |
| | | | WO 2000-0534730 | W 20001221 |

OTHER SOURCE(S): MARPAT 135:92447
 GI



L4 ANSWER 93 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 2 inhibitors)
 RN 363627-08-1 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-[2-(dimethylamino)-2-phenylethyl]- (9CI)
 (CA INDEX NAME)

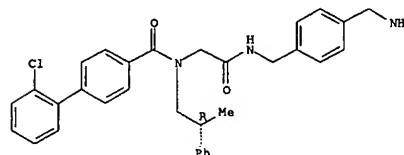


REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 94 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

AB Synthesis of aminoalkylamide derivs. R1R2NR4N(R3)COGH2N(L)Z(CH2)pAr [R1, R2 independently = H, alkyl, alkylcarbonyl, perhaloalkyl, (un)substituted Ph, phenylalkyl, phenylcarbonyl, (un)substituted pyridyl, pyridylalkyl, pyridylcarbonyl, (un)substituted thienyl, thienylalkyl, thienylcarbonyl; R3 = H, (un)substituted alkyl, alkenyl, alkynyl; R4 = alkyl, cyclopentyl, cyclohexyl, cyclohexylCH2, CH2cyclohexylCH2, CH2phenylCH2, COCH2phenylCH2, COalkyl, cyclohexylCH2cyclohexyl; R2, R3, R4 can be taken together with N to form heterocycle; L = (un)substituted alkyl, cycloalkyl, bicyclic; p = 0-1; Ac = (un)substituted Ph, naphthyl, thienyl, furyl], pharmaceutical compns. (no data) containing them and their use in the treatment of reproductive disorders and affective conditions are disclosed. Thus, (I) is prepared by attachment of 1,4-xylenediamine to Wang resin, coupling with bromoacetic acid, (R)- β -methylphenethylamine, 4-bromophenylsulfonyl chloride and 2-chlorobenzenboronic acid followed by cleavage of the resin support. I shows an EC50hFSHR of 0.04 μ M CHOCAMP in antagonist assay.
 IT 348097-32-5P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (synthesis of substituted aminoalkylamide derivs. as antagonists of FSH)
 RN 348097-32-5 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-[2-[[[4-(aminomethyl)phenyl]methyl]amino]-2-oxoethyl]-2'-chloro-N-[(2R)-2-phenylpropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 95 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2001:331328 HCAPLUS
 DOCUMENT NUMBER: 134:326766
 TITLE: Preparation of amino acid derivatives of aminobenzoic and aminobiphenylcarboxylic acids as anti-cancer agents
 INVENTOR(S): Blood, Christine H.; Neustadt, Bernard R.; Smith, Elizabeth M.
 PATENT ASSIGNEE(S): Schering Corporation, USA
 SOURCE: U.S., 29 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

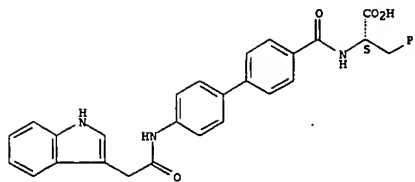
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| US 6228985 | B1 | 20010508 | US 1998-82787 | 19980521 |
| PRIORITY APPLN. INFO.: | | | US 1998-82787 | 19980521 |

OTHER SOURCE(S): MARPAT 134:326766
 AB Compds. Q-NH(CH₂)_nCGH₄CGH₄CO-R or Q-NH(CH₂)_nCGH₄CO-R [n is 0 or 1; R is NH₂ or NHCHR₁R₂, where R₁, R₂ = H, alkyl, aralkyl, heteroaralkyl, carboxy, carboxyalkyl, carbamoyl; Q is R₃C(O) or R₄CONHCHR₅CO, where R₅ = H, alkyl, aralkyl, heteroaralkyl, carbamoylalkyl; R₃, R₄ = H, alkyl, alkoxy, arylalkoxy, aralkyl, heteroaralkyl, carbamoylalkyl (substituents in the biphenylcarboxylic and benzoic acids may not be in ortho,ortho'- and ortho-positions, resp.)] or biolabile esters or pharmaceutically acceptable salts were prepared. The compds. are useful for treating urokinase-type plasminogen activator (uPA) or urokinase-type plasminogen activator receptor (uPAR)-mediated disorders, e.g., tumor metastasis, tumor angiogenesis, restenosis, chronic inflammation, or corneal angiogenesis. Thus, N-[4-[(4-(3-indolylacetyl)amino]phenyl]benzoyl]-L-phenylalanine was prepared by the solid-phase method and showed IC₅₀ = 20 nM for binding of radioligand c-[125I-Tyr²⁴]-ATFp.

IT 336103-27-6P
 RI: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of amino acid derivs. of aminobenzoic and aminobiphenylcarboxylic acids as anti-cancer agents)
 RN 336103-27-6 HCAPLUS
 CN L-Phenylalanine, N-[[4'-[(1H-indol-3-ylacetyl)amino][1,1'-biphenyl]-4-yl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 95 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



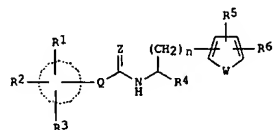
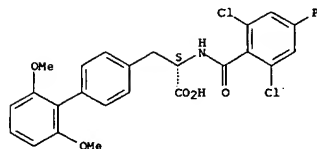
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 96 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2001:232516 HCAPLUS
 DOCUMENT NUMBER: 134:275760
 TITLE: Medicine compositions for treatment of integrin α4-mediated cell adhesion-associated diseases
 INVENTOR(S): Sircar, Ila; Gudmundsson, Kristjan S.; Martin, Richard
 PATENT ASSIGNEE(S): Tanabe Seiyaku Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 88 pp.
 CODEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|------------|
| JP 2001089368 | A2 | 20010403 | JP 2000-216898 | 20000718 |
| JP 3795305 | B2 | 20060712 | | |
| PRIORITY APPLN. INFO.: | | | JP 1999-204581 | A 19990719 |

OTHER SOURCE(S): MARPAT 134:275760
 GI

L4 ANSWER 96 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



AB The medicine compns. (I; A = aromatic hydrocarbon ring; Q = binding linkage; N = 0, 1, 2; W = O, S, -CH=CH-, -N=CH-; Z = O, S; R₁, R₂, R₃ = H, halogen, (substituted)low alkyl; R₄ = tetrazolyl, carboxyl, etc.; R₅ = H, nitro, (substituted)amino, OH low alkanoyl, etc.; R₆ = (substituted)phenyl, etc.) and their pharmacol. acceptable salts are claimed for treatment of integrin α4-mediated cell adhesion-associated diseases, including asthma, diabetes, rheumatoid arthritis, inflammatory bowel disease, and digestive tract and other diseases associated with leukocyte infiltration in the epithelium (e.g. skin, urethra, bronchiole, synovial membrane and transplanted kidney, liver, heart, blood vessel, and nerve tissues, and pancreas and other diseases including psoriasis, atopic dermatitis, contact dermatitis, systemic lupus erythematosus, etc.). I were prepared, and their inhibitory effects on cell adhesion were tested in vitro.

IT 232274-75-8P
 RI: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (phenylalanine analogs as medicine compns. for treatment of integrin α4-mediated cell adhesion-associated diseases)

RN 232274-75-8 HCAPLUS
 CN [1,1'-Biphenyl]-4-propanoic acid, α-[[[3,5-dichloro[1,1'-biphenyl]-4-yl]carbonyl]amino]-2',6'-dimethoxy-, (αS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 97 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 ACCESSION NUMBER: 2001:228855 HCAPLUS
 DOCUMENT NUMBER: 134:252658
 TITLE: Preparation of tyrosine derivatives as inhibitors of $\alpha 4$ containing integrin-mediated binding to ligands VCAM-1 and MadCAM.
 INVENTOR(S): Jackson, David Y.; Sailes, Frederick C.; Sutherland, Daniel P.
 PATENT ASSIGNEE(S): Genentech, Inc., USA
 SOURCE: PCT Int. Appl., 86 pp.
 CODEN: PIXX02
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

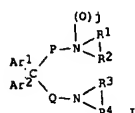
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|-------------|
| WO 2001021584 | A1 | 20010329 | WO 2000-US26326 | 20000925 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| CA 2385882 | AA | 20010329 | CA 2000-2385882 | 20000925 |
| EP 1214292 | A1 | 20020619 | EP 2000-965417 | 20000925 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL | | | |
| US 6469047 | B1 | 20021022 | US 2000-669779 | 20000925 |
| JP 2003509488 | T2 | 20030311 | JP 2001-524964 | 20000925 |
| AU 780385 | B2 | 20050317 | AU 2000-76138 | 20000925 |
| US 2004110753 | A1 | 20040610 | US 2002-198328 | 20020716 |
| US 2004158076 | A1 | 20040812 | US 2004-772678 | 20040204 |
| PRIORITY APPLN. INFO.: | | | US 1999-156062P | P 19990924 |
| | | | US 2000-669779 | A1 20000925 |
| | | | WO 2000-US26326 | W 20000925 |
| | | | US 2002-198328 | A1 20020716 |

OTHER SOURCE(S): MARPAT 134:252658
 AB Tyrosine derivs., e.g., ArCH₂CH(N(A)(Z))CO-Y [Z = H, alkyl; A = B(CH₂)_q-X-, where B = (un)substituted Ph and X = CO, SO₂, null or B = cyanoalkyl, carbocyclyl or heterocyclyl and X = CO; R₆ = H, alkyl, amino, cyano, hydroxy, alkylsulfonyl, etc.; q = 0-3; Y is H, (un)substituted alkoxyl, alkoxylalkoxy, arylalkoxy, alkylaminoalkoxy, dialkylaminoalkoxy, alkylamino, arylamino, heterocyclyl or heteroarylalkyl; Ar is Ph which has hydroxy, carbonate, thiocarbonate, carbamoyloxy or acyloxy groups and optionally other substituents] were prepared as inhibitors of $\alpha 4$ containing integrin-mediated binding to ligands such as VCAM-1 and MadCAM. Methods of synthesis are described and inhibitory binding data are tabulated for 416 compds., including N-(o-chlorobenzoyl)-O-(allylcarbamoyl)-L-tyrosine, for which IC₅₀ is < 1.0 micromolar.
 IT 331470-94-1P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

L4 ANSWER 98 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 ACCESSION NUMBER: 2001:228703 HCAPLUS
 DOCUMENT NUMBER: 134:252267
 TITLE: Preparation of diarylalaninediamine derivatives as melanin concentrating hormone (MCH) antagonists
 INVENTOR(S): Kato, Kaneyoshi; Mori, Masaaki; Suzuki, Nobuhiro; Shimomura, Yukio; Takekawa, Shiro; Choh, Nobuo
 PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
 SOURCE: PCT Int. Appl., 284 pp.
 CODEN: PIXX02
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2001021169 | A1 | 20010329 | WO 2000-JP6376 | 20000919 |
| W: | AE, AG, AL, AM, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CN, CR, CU, CZ, DM, DZ, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV, MA, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, US, UZ, VN, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| CA 2383147 | AA | 20010329 | CA 2000-2383147 | 20000919 |
| AU 2000073158 | A5 | 20010424 | AU 2000-73158 | 20000919 |
| JP 2002097138 | A2 | 20020402 | JP 2000-288894 | 20000919 |
| EP 1219294 | A1 | 20020703 | EP 2000-961076 | 20000919 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL | | | |
| PRIORITY APPLN. INFO.: | | | JP 1999-266278 | A 19990920 |
| | | | JP 2000-221055 | A 20000717 |
| | | | WO 2000-JP6376 | W 20000919 |

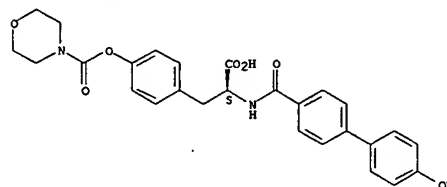
OTHER SOURCE(S): MARPAT 134:252267
 GI



AB Compds. of general formula [I] wherein Ar1 and Ar2 are each an optionally substituted aromatic group; P and Q are each a divalent aliphatic hydrocarbon group which may contain ethereal oxygen or sulfur in the carbon chain and may be substituted; R1 and R3 are each (i) hydrogen, (ii) acyl, or (iii) optionally substituted hydrocarbyl; R2 and R4 are each (i) hydrogen, (ii) optionally substituted alkyl, or (iii) optionally substituted alkylcarbonyl; alternatively R1 and R2 or R3 and R4 together with the nitrogen atom adjacent thereto may form a monocyclic or fused nitrogenous

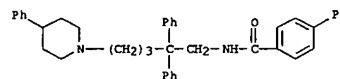
L4 ANSWER 97 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of tyrosine derivs. as inhibitors of $\alpha 4$ contg. integrin-mediated binding to ligands VCAM-1 and MadCAM.)
 RN 331470-94-1 HCAPLUS
 CN L-Tyrosine, N-[(4'-hydroxy[1,1'-biphenyl]-4-yl)carbonyl]-, 4-(4-morpholinecarboxylate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



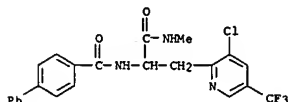
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 98 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 heterocyclic groups and j is 0 or 1), salts of the same, or prodrugs thereof are prepd. These compds. are useful for the treatment of diseases caused by MCH, e.g. obesity (as antiobesity agents) or overeating (as appetite depressants), or for the improvement of emotional disorders or sexual function. Thus, benzyl 2-[(5-hydroxy-2,2-diphenylpentyl)amino]-2-oxoethylcarbamate was brominated by Br and Ph₃P in MeCN at room temp. for 1 h to give benzyl 2-[(5-bromo-2,2-diphenylpentyl)amino]-2-oxoethylcarbamate which was dissolved in MeCN, treated with 4-phenylpiperidine and K₂CO₃ in MeCN, and stirred at 40° overnight to give, after purifn. on alumina column chromatog. and conversion into the HCl, benzyl 2-[(2,2-diphenyl-5-(4-phenylpiperidino)pentyl)amino]-2-oxoethylcarbamate hydrochloride (II). II in vitro inhibited the binding of [35S]-guanosine 5'-(γ -thio)triphosphate to human somatostatin-like receptor (SLC-1) with IC₅₀ of 5 nM. Tablet formulations contg. II were described.
 IT 331629-33-5P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of diarylalaninediamine derivs. as melanin concentrating hormone (MCH) antagonists for treating MCH-caused diseases)
 RN 331629-33-5 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-[2,2-diphenyl-5-(4-phenyl-1-piperidinyl)pentyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 100 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



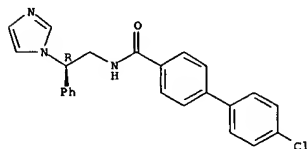
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 101 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:113263 HCAPLUS
DOCUMENT NUMBER: 134:235011
TITLE: Selective inhibitors of CYP24: mechanistic tools to explore vitamin D metabolism in human keratinocytes
AUTHOR(S): Schuster, I.; Egger, H.; Astecker, N.; Herzig, G.; Schussler, M.; Vorisek, G.
CORPORATE SOURCE: Novartis Research Institute, Vienna, Austria
SOURCE: Steroids (2001), 66(3-5), 451-462
CODEN: STEDAM; ISSN: 0039-128X
PUBLISHER: Elsevier Science Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Human keratinocytes are fully competent cells of the vitamin D (VD) hormone system. They have the capacity to generate VD, to convert it to hormonally active 1 α ,25(OH) $_2$ D $_3$ and subsequently, to metabolize the hormone by self-induced CYP24. These reactions generate a cascade of highly transient products and, eventually terminate biol. activity. To elucidate regulatory principles in the VD cascade in more detail, we made use of novel selective CYP24 inhibitors, recently synthesized by our group. Here, we describe the effects of VID 400 and SDZ 89-443 on the metabolism of 20 nM 3H-25(OH)D $_3$ in human keratinocytes, analyzed by sensitive HPLC methods. First, we present evidence that freshly generated 1 α ,25(OH) $_2$ D $_3$ does not down-regulate 1 α -hydroxylation, as commonly assumed. The transient time course of 1 α ,25(OH) $_2$ D $_3$, could be explained by its fast 24-hydroxylation to polar products, undetectable by usual HPLC-anal. of organic exts. On inhibition of CYP24, 1 α -hydroxylation continued throughout extended periods, indicating its constitutive nature. Asking whether 1 α ,25(OH) $_2$ D $_3$ derived metabolites [1 α ,25(OH) $_2$ 2-3epi-D $_3$, 1 α ,24(R),25(OH) $_3$ D $_3$, 1 α ,25(OH) $_2$ 2-24-oxo-D $_3$, 1 α ,23(S),25(OH) $_3$ 3-24-oxo-D $_3$ and calcitric acid] would regulate 1 α -hydroxylase, we pretreated cells with 20 nM of these metabolites for 5 h and 24 h. Subsequent incubation with 3H-25(OH)D $_3$ demonstrated that neither metabolite substantially impaired 1 α -hydroxylase, while all of them transiently induced CYP24 activity. Analyzing the effects of VID 400 on the kinetics of 3H-25(OH)D $_3$, we showed that 1 α -hydroxylation rather than 24-hydroxylation was rate-limiting in the C-24 oxidation pathway - again suggesting constitutive expression of 1 α -hydroxylase. CYP24 inhibitors effectively increased the levels and lifetime of all transient 1 α -hydroxylated metabolites, especially of 1 α ,25(OH) $_2$ 2-3epi-D $_3$ that became the predominant lipid soluble metabolite. Highly increased levels of 1 α ,23(S),25(OH) $_3$ 3-24-oxo-D $_3$, the metabolite preceding side chain cleavage, indicated involvement of CYP24 also in the terminal step of the cascade. Besides using inhibitors of CYP24 as tools to explore mechanisms in the VD cascade, they also appear to be valuable to discover the intrinsic biol. functions of distinct metabolites.
IT 174262-10-3, VID 400
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(CYP 24 selective inhibitors as mechanistic tools to explore vitamin D metabolism in human keratinocytes)
RN 174262-10-3 HCAPLUS
CN [1,1'-Biphenyl]-4-carboxamide, 4'-chloro-N-[(2R)-2-(1H-imidazol-1-yl)-2-phenylethyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 101 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

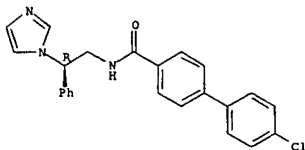
Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 102 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

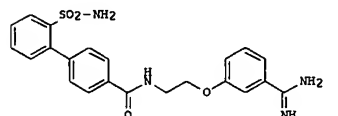
ACCESSION NUMBER: 2001:113259 HCAPLUS
DOCUMENT NUMBER: 135:2064
TITLE: Selective inhibition of vitamin D hydroxylases in human keratinocytes
AUTHOR(S): Schuster, I.; Egger, H.; Bikle, D.; Herzig, G.; Reddy, G. S.; Stuetz, A.; Stuetz, P.; Vorisek, G.
CORPORATE SOURCE: Novartis Research Institute, Vienna, Austria
SOURCE: Steroids (2001), 66(3-5), 409-422
CODEN: STEDAM; ISSN: 0039-128X
PUBLISHER: Elsevier Science Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Human keratinocytes convert 25(OH)D $_3$ to hormonally active 1 α ,25(OH) $_2$ D $_3$ and respond to its anti-proliferative/pro-differentiating action in vitro and in vivo. Levels and activity of 1 α ,25(OH) $_2$ D $_3$ are short-lived. The 1 α ,25(OH) $_2$ D $_3$ induces 24-hydroxylase (CYP24) that rapidly metabolizes the hormone, yielding a cascade of side-chain oxidized products and this eventually results in the loss of activity. Aiming at stabilizing the levels of active hormone, we have searched for potent, selective inhibitors of CYP24. Selective inhibition was crucial in order to avoid impairment of 1 α ,25(OH) $_2$ D $_3$ synthesis, catalyzed by 1 α -hydroxylase, a related member of cytochrome P 450 (CYP) superfamily. We describe here the testing protocol, using primary human keratinocyte cultures as an appropriate source of CYP24 and 1 α -hydroxylase. 3H-25(OH)D $_3$ (at physiol. concns.) as substrate and sensitive HPLC techniques to analyze the complex metabolite profiles. Four hundred potential inhibitors were screened by this method; most of them were synthesized in our laboratory. These compds. (entitled azoles) were capable of direct binding to the heme iron and of addnl. interactions with other parts of the enzyme. In this paper, we present VID400 and SDZ 89-443, as first examples of powerful selective CYP24 inhibitors. As anticipated, these compds. increased the levels of 1 α -hydroxylated products generated from 3H-25(OH)D $_3$ and extended their lifetime. Importantly, blocking of 24-hydroxylation led to a switch in metabolism, namely to preferential conversion of 1 α ,25(OH) $_2$ D $_3$ to 1 α ,25(OH) $_2$ 2-3epi-D $_3$. As spin-off from our program, selective inhibitors of 1 α -hydroxylase were also found (e.g., SDZ 88-357). Using 3H-25(OH)D $_3$ as substrate in the absence of SDZ 88-357, CYP24 showed high preference for freshly generated 1 α -hydroxylated metabolites over abundant 25(OH)D $_3$. In the presence of SDZ 88-357, we noticed a great increase in 24-hydroxylation of 3H-25(OH)D $_3$. Besides their use as valuable tools in elucidating regulatory mechanisms, inhibitors of vitamin D hydroxylases may give rise to novel therapeutic strategies, especially in defects of cell growth and differentiation.
IT 174262-10-3, VID400
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(selective inhibition of vitamin D hydroxylases in human keratinocytes)
RN 174262-10-3 HCAPLUS
CN [1,1'-Biphenyl]-4-carboxamide, 4'-chloro-N-[(2R)-2-(1H-imidazol-1-yl)-2-phenylethyl]- (9CI) (CA INDEX NAME)
Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2000:842104 HCAPLUS
DOCUMENT NUMBER: 134:29204
TITLE: Preparation of benzamides and arylamides as inhibitors of factor Xa
INVENTOR(S): Zhu, Bing-Yan; Zhang, Fenglie; Scarborough, Robert M.
PATENT ASSIGNEE(S): Cor Therapeutics, Inc., USA
SOURCE: PCT Int. Appl., 104 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

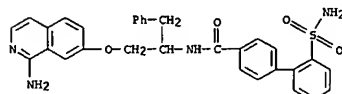
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|------------------|-----------------|------------|
| WO 2000071508 | A2 | 20001130 | WO 2000-US14208 | 20000524 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, T2, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2374650 | AA | 20001130 | CA 2000-2374650 | 20000524 |
| EP 1185508 | A2 | 20020313 | EP 2000-932732 | 20000524 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| JP 2003500383 | T2 | 20030107 | JP 2000-619765 | 20000524 |
| US 6638960 | B1 | 20031028 | US 2000-576633 | 20000524 |
| PRIORITY APPLN. INFO.: | | | US 1999-135849P | P 19990524 |
| | | | WO 2000-US14208 | W 20000524 |
| OTHER SOURCE(S): | | MARPAT 134:29204 | | |
| GI | | | | |



AB AYDEGJZL [wherein A = (cyclo)alkyl, (un)substituted amino, imino, amidino, guanidino, Ph, naphthyl, heterocyclic ring, etc.; Y = bond, CH2, CO, NR4CH2, CH2NR4, NR4, CONR4, NR4CO, C(:NR4), C(:N4)NR4a, C(:NR4)CH2, C(:NR4)NR4aCH2, SO2, O, SO2NR4, or NR4SO2; R4 and R4a = independently H, alkyl, alkenyl, alkynyl, (alkyl)cycloalkyl, or (un)substituted alkylphenyl or alkylphenyl; D = bond, (un)substituted Ph, naphthyl, or

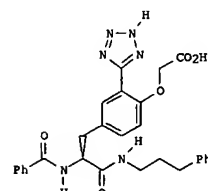
L4 ANSWER 103 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
heterocyclic ring; E = NR5CO, NR5CONR6, SO2NR5, NR5SO2NR6, NR5SO2NR6CO; R5 and R6 = H, alkyl, alkenyl, alkynyl, (alkyl)cycloalkyl or (un)substituted alkylphenyl, alkylphenyl, alkylheteroaryl, carboxyalkyl, carbamidoalkyl, etc.; G = (un)substituted methylene, ethylene, or propylene; J = bond, CONR11, NR11CO, NR11, NR11CH2, O, S, SO2, SO, OCH2, or SO2CH2; R11 = H, alkyl, alkenyl, alkynyl, (alkyl)cycloalkyl or (un)substituted alkylphenyl, alkylphenyl, or alkylheteroaryl; Z = (un)substituted Ph, naphthyl, or heterocyclic ring; L = H, CN, CONR12NR13, (CH2)10-2NR12R13, C(:NR12)NR12R13, NR12R13, OR12, NR12C(:NR12)NR12R13, or NR12C(:NR12)R13; R12 and R13 = independently H, OH, alkyl, (un)substituted alkoxy, (di)alkylamino, alkylphenyl, alkylphenyl, carboxyalkyl, etc.] were prepd. as potent and highly selective inhibitors of factor Xa for the prevention or treatment of coagulation disorders (no data). For example, N-tert-butoxycarbonylarginine was condensed with 3-cyanophenol in the presence of PPh3 and DEAD in CH2Cl2 (93%), and the amine deprotected and converted to the salt using TFA. Reaction of the TFA amine salt with 2'-(tert-butylaminosulfonyl)-4-biphenylcarboxylic acid in the presence of BOP and i-Pr2NEt in DMF gave the amide (84%). The benzimidazole was converted to the desired benzamide salt (I=TFA) in 85% yield by bubbling HCl gas through a soln. of the amide intermediate in MeOH, followed by neutralization and workup using 0.5% TFA in H2O/MeCN. Comps. of the invention show selectivity for factor Xa vs. other proteases of the coagulation cascade or the fibrinolytic cascade, and are useful as diagnostic reagents as well as antithrombotic agents (no data).

IT 309930-04-9P
RI: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of benzamides and arylamides factor Xa inhibitors from benzimidazoles and arylamides)
RN 309930-04-9 HCAPLUS
CN [1,1'-Biphenyl]-4-carboxamide, N-[1-[[[1-amino-7-isoquinolinyl]oxy]methyl]-2-phenylethyl]-2'-(aminosulfonyl)- (9CI) (CA INDEX NAME)



ACCESSION NUMBER: 2000:645993 HCAPLUS
DOCUMENT NUMBER: 133:238324
TITLE: Preparation of tyrosine amides and analogs as protein tyrosine phosphatase inhibitors
INVENTOR(S): Larsen, Scott D.; May, Paul D.; Bleasdale, John E.; Liljebriis, Charlotta; Schostarez, Heinrich Josef; Barf, Tjeerd; Nilsson, Marianne
PATENT ASSIGNEE(S): Pharmacia and Upjohn AB, Sued.
SOURCE: PCT Int. Appl., 124 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|-------------------|-----------------|-------------|
| WO 2000053583 | A1 | 20000914 | WO 2000-US6022 | 20000309 |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, T2, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 6410585 | B1 | 20020625 | US 1999-265410 | 19990310 |
| CA 2366308 | AA | 20000914 | CA 2000-2366308 | 20000309 |
| EP 1161421 | A1 | 20011212 | EP 2000-917793 | 20000309 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| JP 2002539115 | T2 | 20021119 | JP 2000-604023 | 20000309 |
| AU 769511 | B2 | 20040129 | AU 2000-38711 | 20000309 |
| PRIORITY APPLN. INFO.: | | | US 1999-265410 | A 19990310 |
| | | | US 1997-57730P | P 19970828 |
| | | | US 1998-138642 | A2 19980824 |
| | | | WO 2000-US6022 | W 20000309 |
| OTHER SOURCE(S): | | MARPAT 133:238324 | | |
| GI | | | | |



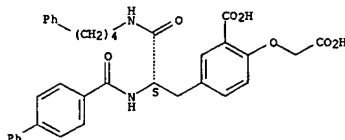
L4 ANSWER 104 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

AB R2CH2CR1R2NH2IR3 [I: R = OSO3H, OCH2CO2R4, OCH2CONHOH, N(CH2CO2R4)2, etc.; R1 = H, CH2OH, alkylcarbamoyl, etc.; R2 = H or Me; R4 = H or (phenyl)alkyl; Z = (un)substituted 1,4-phenylene; Z1 = CO or SO2] were prepared. Thus, (S)-Me2CO2CNHCH(CO2H)CH2C6H3(OH)I-4,3 was amidated by Ph(CH2)4NH2 and the product converted in 5 steps to title compound II. Data for Biol. activity of I were given.

IT 292834-48-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of tyrosine amides and analogs as protein tyrosine phosphatase inhibitors)

RN 292834-48-1 HCAPLUS
CN Benzoic acid, 5-[(2S)-2-[(1,1'-biphenyl]-4-ylcarbonyl)amino]-3-oxo-3-[(4-phenylbutyl)amino]propyl]-2-(carboxymethoxy)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 105 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:543073 HCAPLUS
DOCUMENT NUMBER: 133:261091
TITLE: Crystal Structures of Human Factor Xa Complexed with Potent Inhibitors

AUTHOR(S): Malignan, Sebastien; Guilloteau, Jean-Pierre; Pouzieux, Stephane; Choi-Sladeski, Yong Mi; Becker, Michael R.; Klein, Scott I.; Ewing, William R.; Pauls, Henry W.; Spada, Alfred P.; Mikol, Vincent

CORPORATE SOURCE: Department of Structural Biology, Aventis Pharma, Vitry/Seine, F-94403, Fr.

SOURCE: Journal of Medicinal Chemistry (2000), 43(17), 3226-3232
CODEN: JMCHAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Involved in the coagulation cascade, factor Xa (FXa) is a serine protease which has received great interest as a potential target for the development of new antithrombotics. Although there is a great wealth of structural data on thrombin complexes, few structures of ligand/FXa complexes have been reported, presumably because of the difficulty in growing crystals. Reproducible crystallization conditions for human des-Glu1-45 coagulation FXa have been found. This has led to an improvement in the diffraction quality of the crystals (about 2.1 Å) when compared to the previously reported forms (2.3-2.8 Å) thus providing a suitable platform for a structure-based drug design approach. A series of crystal structures of noncovalent inhibitors complexed with FXa have been determined, three of which are presented herein. These include compds. containing the benzamidine moiety and surrogates of the basic group. The benzamidine-containing compound binds in a canonical fashion typical of synthetic serine protease inhibitors. On the contrary, mols. that contain surrogates of the benzamidine group do not make direct hydrogen-bonding interactions with the carboxylate of Asp189 at the bottom of the S1 pocket. The structural data provide a likely explanation for the specificity of these inhibitors and a great aid in the design of bioavailable potent FXa inhibitors.

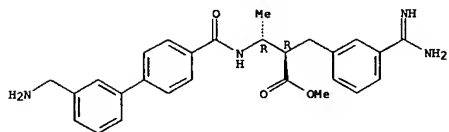
IT 296761-71-2 RPR 128515
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(crystal structures of human factor Xa complexed with potent inhibitors)

RN 296761-71-2 HCAPLUS
CN Benzenepropanoic acid, 3-(aminoiminomethyl)-α-[(1R)-1-[(3'-aminomethyl)[1,1'-biphenyl]-4-yl]carbonyl]amino]ethyl]-, methyl ester, (αR) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 105 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



L4 ANSWER 106 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:433346 HCAPLUS
DOCUMENT NUMBER: 133:73861
TITLE: Preparation of α-amidinobenzyl-β-(aroylamino)alkanoates and analogs as factor Xa inhibitors

INVENTOR(S): Klein, Scott I.; Guertin, Kevin R.; Spada, Alfred P.

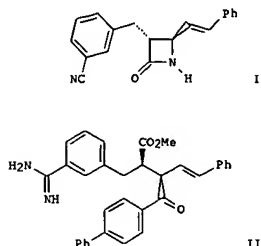
PATENT ASSIGNEE(S): Aventis Pharmaceuticals Products, Inc., USA

SOURCE: U.S., 118 pp., Cont.-in-part of U.S. 9724118.
CODEN: USXXAM

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|-------------|
| US 6080767 | A | 20000627 | US 1997-884405 | 19970627 |
| WO 9724118 | A1 | 19970710 | WO 1996-US20770 | 19961223 |
| W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN | | | | |
| RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| CA 2264556 | AA | 19990107 | CA 1998-2264556 | 19980626 |
| WO 9900356 | A1 | 19990107 | WO 1998-US13550 | 19980626 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW | | | | |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, CA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9881771 | A1 | 19990119 | AU 1998-81771 | 19980626 |
| AU 741173 | B2 | 20011122 | | |
| EP 931060 | A1 | 19990728 | EP 1998-931728 | 19980626 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO | | | | |
| BR 9806060 | A | 19990831 | BR 1998-6060 | 19980626 |
| JP 2001500532 | T2 | 20010116 | JP 1999-505870 | 19980626 |
| AP 1061 | A | 20020424 | AP 1999-1467 | 19980626 |
| W: GH, GM, KE, LS, MW, SD, SZ, UG, ZW | | | | |
| PL 191115 | B1 | 20060331 | PL 1998-331985 | 19980626 |
| ZA 9805664 | A | 19990113 | ZA 1998-5664 | 19980629 |
| NO 9900854 | A | 19990423 | NO 1999-854 | 19990223 |
| NO 314758 | B1 | 20030519 | | |
| US 6323227 | B1 | 20011127 | US 1999-259528 | 19990226 |
| US 6277865 | B1 | 20010821 | US 1999-273618 | 19990322 |
| HK 1022685 | A1 | 20060127 | HK 2000-101706 | 20000321 |
| PRIORITY APPLN. INFO.: | | | US 1996-9485P | P 19960102 |
| | | | WO 1996-US20770 | A2 19961223 |
| | | | US 1997-884405 | A 19970627 |
| | | | US 1998-79002P | P 19980323 |
| | | | WO 1998-US13550 | W 19980626 |

OTHER SOURCE(S): MARPAT 133:73861
GI



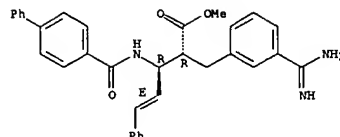
AB H2NCR1R2SCH2CHR3CH4NR5COR6 [R1,R2 = H; R1R2 = NR9; R3 = H, COR6, CO2R6, CON(R6)2, CH2OR7, CH2SR7; R4 = H, (hydroxy)alkyl, aminoalkyl, (CH2CH2)nR, (CH2CH)nR, CH2R; R = (un)substituted (hetero)aryl; R5 = (ar)alk(en)yl, heterocyclyl, (hetero)aryl, etc.; R6,R8 = H or alkyl; R7 = H, alkyl, acyl, (hetero)aryl, etc.; R9 = H, OH, alkoxycarbonyl, alkanoyl, etc.; 2 = phenylene; n = 0-2] were prepared as factor Xa inhibitors (no data). Thus, 4-(NC)C6H4CH:CHCO2Me was cyclocondensed with 4-(MeO)C6H4N:CHCH:CHPh (preparation each given) to give, after N-deprotection, β -lactam I. The latter was N-acylated by 4-PhC6H4COCl and the product hydrolyzed to give, after amination/esterification, title compound II.

IT 193151-17-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of α -amidinobenzyl- β -(aroylamino)alkanoates and analogs as factor Xa inhibitors)

RN 193151-17-6 HCAPLUS

CN Benzenepropanoic acid, 3-(aminoiminomethyl)- α -[[(1R,2E)-1-[[[1,1'-biphenyl]-4-ylcarbonyl]amino]-3-phenyl-2-propenyl]-, methyl ester, (eR)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2000:431292 HCAPLUS

DOCUMENT NUMBER: 133:164438

TITLE: A new polymer-bound N-hydroxysuccinimidyl active ester linker

AUTHOR(S): Shao, Hui; Zhang, Qiang; Goodnow, Robert; Chen, Li; Tam, Steve

CORPORATE SOURCE: Department of Discovery Chemistry, Roche Research Center, Hoffmann-La Roche, Inc., Nutley, NJ, 07110, USA

SOURCE: Tetrahedron Letters (2000), 41(22), 4257-4260
CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

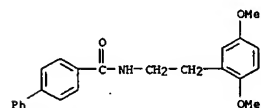
LANGUAGE: English

AB Synthesis of a new N-hydroxysuccinimidyl resin is described and the N-acylation with this resin provides amide products in high yields and excellent purities. This new linker is suitable for combinatorial library synthesis.

IT 287945-53-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of polymer-bound N-hydroxysuccinimidyl active ester linker for N-acylation)

RN 287945-53-3 HCAPLUS

CN [1,1'-Biphenyl]-4-carboxamide, N-[2-(2,5-dimethoxyphenyl)ethyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2000:314533 HCAPLUS

DOCUMENT NUMBER: 132:334285

TITLE: Preparation of phenyloxoazapropylcycloalkane derivatives and analogs as potassium channel inhibitors

INVENTOR(S): Baker, Robert K.; Chee, Jennifer; Bao, Jianming; Garcia, Maria L.; Kaczorowski, Gregory J.; Kotliar, Andrew; Kayser, Frank; Liu, Chou Juitsai; Miao, Shouwu; Rupprecht, Kathleen M.; Parsons, William H.; Schmalhofer, William A.; Claiborne, Christopher F.; Liverton, Nigel; Claremon, David A.; Thompson, Wayne J.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA

SOURCE: PCT Int. Appl., 243 pp.
CODEN: PIXAD2

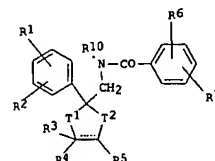
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-------------------|------------|
| WO 2000025770 | A1 | 20000511 | WO 1999-US24949 | 19991026 |
| W: | AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| US 6632836 | B1 | 20031014 | US 1999-422143 | 19991021 |
| CA 2348742 | AA | 20000511 | CA 1999-2348742 | 19991026 |
| EP 1143965 | A1 | 20011017 | EP 1999-955159 | 19991026 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | |
| JP 2002528490 | T2 | 20020903 | JP 2000-579211 | 19991026 |
| AU 764477 | B2 | 20030821 | AU 2000-11331 | 19991026 |
| PRIORITY APPLN. INFO.: | | | US 1998-106416P | P 19981030 |
| | | | WO 1999-US24949 | W 19991026 |
| OTHER SOURCE(S): | | | MARPAT 132:334285 | |
| GI | | | | |



L4 ANSWER 108 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

AB The title compds. I [T1 = (CH₂)_x; T2 = (CH₂)_y; dotted line indicates a single bond or double bond; x, y = 0 - 2; R1, R2, R6, R7 = halo, hydroxy, alkyl, etc.; R3, R4 = H, cyano, nitro, etc.; further details on R3 and R4 are given; R5 = H, halo, hydroxy, etc.; further details on R3 and R5 are given; R10 = H, etc.], useful as potassium channel inhibitors (no data), are prepared. I are useful in the treatment of autoimmune disorders, cardiac arrhythmias (no data), etc. Formulations are given.

IT 267405-09-4P

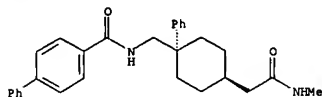
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and effect of phenyloxazapropylcycloalkane derivs. and

analogs with potassium channel inhibiting activity)

RN 267405-09-4 HCAPLUS

CN [1,1'-Biphenyl]-4-carboxamide, N-[(cis-4-[2-(methylamino)-2-oxoethyl]-1-phenylcyclohexyl)methyl]- (9CI) (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 109 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:205428 HCAPLUS
DOCUMENT NUMBER: 132:347395

TITLE: Resin-to-Resin Suzuki Coupling of Solid Supported Arylboronic Acids

AUTHOR(S): Gravel, Michel; Berube, Christian D.; Hall, Dennis G.
CORPORATE SOURCE: Department of Chemistry, University of Alberta, Edmonton, AB, T6G 2G2, Can.

SOURCE: Journal of Combinatorial Chemistry (2000), 2(3), 228-231

CODEN: JCCHFF; ISSN: 1520-4766

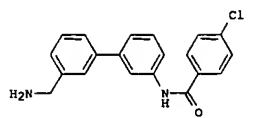
PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 132:347395

GI



AB The first resin-to-resin coupling reaction generating carbon-carbon bonds has been achieved by the palladium-catalyzed Suzuki coupling of di(ethanolamino)methylpolystyrene-bound arylboronic acids with resin-bound iodoarenes to give biaryl derivs. in 55-100% yields upon cleavage of the resin with trifluoroacetic acid in methylene chloride. E.g., resin-bound 3-aminobenzeneboronic acid was treated with 4-chlorobenzoyl chloride to give an resin-bound amide derivative; addition of 0.25 equivalent resin-bound

3-iodobenzylamine and stirring at 105° in DMF in the presence of tetrakis(triphenylphosphine)palladium (0), ethylene glycol, and triethylamine gave a resin-bound aminomethylbiaryl amide which was liberated from the resin with a 1:1 solution of trifluoroacetic acid in methylene chloride to give I in 100% yield. A library of six biaryl derivs. was prepared using the resin-to-resin Suzuki coupling procedure. The resin-to-resin Suzuki coupling procedure allows the preparation of unsym.

biaryl derivs. that would be more difficult to prepare on a single solid phase.

IT 268748-27-2P

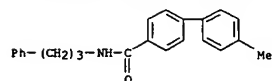
RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of biaryl derivs. by resin-to-resin Suzuki coupling of di(ethanolamino)methylpolystyrene-bound arylboronic acids to resin-bound iodoarenes)

RN 268748-27-2 HCAPLUS

CN [1,1'-Biphenyl]-4-carboxamide, 4'-methyl-N-(3-phenylpropyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 109 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 110 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:146876 HCAPLUS
DOCUMENT NUMBER: 132:288307

TITLE: Amido-(propyl and allyl)-hydroxybenzamidines: development of achiral inhibitors of factor Xa

AUTHOR(S): Gong, Yong; Pauls, Henry W.; Spada, Alfred P.; Czekaj, Mark; Liang, Guyan; Chu, Valeria; Colussi, Dennis J.; Brown, Karen D.; Gao, Jingbo

CORPORATE SOURCE: Department of Medicinal Chemistry, Rhone-Poulenc Rorer, Collegeville, PA, 19426-0107, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2000), 10(3), 217-221

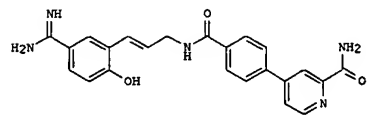
CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB The design, synthesis and SAR of amido-(Pr and allyl)-hydroxybenzamidines coagulation factor Xa inhibitors is described. These achiral inhibitors are selective for fXa vis a vis structurally related serine proteases and are readily prepared in 6-7 linear steps. The most potent member I (fXa Ki = 0.75 nM) is selective (>1000-fold) and an effective anticoagulant in mammalian plasma.

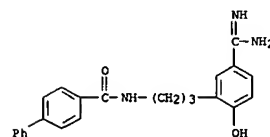
IT 219672-25-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and structure activity of amido-(Pr and allyl)-hydroxybenzamidines in development of achiral inhibitors of factor Xa)

RN 219672-25-0 HCAPLUS

CN [1,1'-Biphenyl]-4-carboxamide, N-[3-[5-(aminomethyl)-2-hydroxyphenyl]propyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

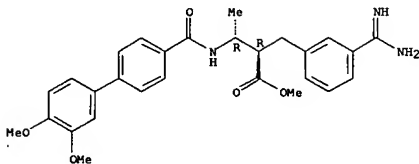
L4 ANSWER 110 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

L4 ANSWER 111 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2000:127383 HCAPLUS
 DOCUMENT NUMBER: 132:303226
 TITLE: Antithrombotic efficacy of RPR208566, a novel factor Xa inhibitor, in a rat model of carotid artery thrombosis
 AUTHOR(S): Heran, C.; Morgan, S.; Kasiewicz, C.; Bostwick, J.; Bentley, R.; Klein, S.; Chu, V.; Brown, K.; Colussi, D.; Czekaj, M.; Perrone, M.; Leadley, R.
 CORPORATE SOURCE: Cardiovascular Drug Discovery, Rhone-Poulenc Rorer, Collegeville, PA, USA
 SOURCE: European Journal of Pharmacology (2000), 389(2/3), 201-207
 CODEN: EJPHAZ; ISSN: 0014-2999
 PUBLISHER: Elsevier Science B.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Coagulation factor Xa is the sole enzyme responsible for activating the zymogen prothrombin to thrombin, resulting in fibrin generation, platelet activation, and subsequent thrombus formation. Our objective was to evaluate the antithrombotic efficacy of the novel factor Xa inhibitor, 2-(3-carbamimidoyl-benzyl)-3-[(3',4'-dimethoxy-biphenyl-4-carbonyl)-amino]-butyric acid Me ester-trifluoroacetate (RPR208566), in a well-established rat model of arterial thrombosis, and to compare the results with those obtained with argatroban and heparin, direct and indirect inhibitors of thrombin, resp. Thrombus formation was initiated by placing a filter paper saturated with FeCl₂ on the adventitia of the carotid artery for 10 min. Time-to-occlusion was measured from initiation of injury until blood flow reached zero. Formed thrombi were removed and weighed 60 min after the placement of the filter paper. RPR208566, heparin, and argatroban dose-dependently increased time-to-occlusion and reduced thrombus mass. When administered at 500 µg/kg+50 µg/kg/min, RPR208566 prolonged time-to-occlusion to 56±4 min (vs. 18±2 min for vehicle) and reduced thrombus mass to 3.0±0.7 mg (vs. 7.3±0.6 mg for vehicle). The highest doses of argatroban (500 µg/kg+50 µg/kg/min) and heparin (300 U/kg+10 U/kg/min) increased time-to-occlusion to the maximum of 60 min and decreased thrombus mass to 5.5±0.8 and 2.6±0.3, resp. The antithrombotic effects of heparin and argatroban at these doses were associated with increases in activated partial thromboplastin time of 5.6±0.9- and 2.9±0.3-fold over baseline, resp. However, the highest dose of RPR208566 produced a modest 1.3±0.1-fold increase in activated partial thromboplastin time. These results indicate that factor Xa inhibition with compds. such as RPR208566 may be an attractive mechanism for novel antithrombotic drug therapy.
 IT 219672-61-4, RPR 208566
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (antithrombotic effect of factor Xa inhibitor RPR208566 in carotid artery thrombosis)
 RN 219672-61-4 HCAPLUS
 CN Benzenepropanoic acid, 3-(aminoininomethyl)-α-[(1R)-1-[(3',4'-dimethoxy[1,1'-biphenyl]-4-yl)carbonyl]amino]ethyl]-, methyl ester, (αR)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)
 CH 1

L4 ANSWER 111 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

CRN 219672-60-3
 CMF C28 H31 N3 O5

Absolute stereochemistry.



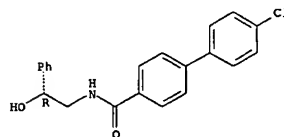
CH 2

CRN 76-05-1
 CMF C2 H F3 O2



REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

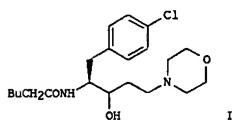
L4 ANSWER 112 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1999:726072 HCAPLUS
 DOCUMENT NUMBER: 132:78347
 TITLE: C-14 labeling of NVP VID400 - A specific vitamin D3-hydroxylase inhibitor
 AUTHOR(S): Moenius, Th.; Bertscher, P.; Egger, H.; Bovermann, G.; Oberer, L.
 CORPORATE SOURCE: Novartis Pharma Ltd., CH-Basel, Switz.
 SOURCE: Journal of Labeled Compounds & Radiopharmaceuticals (1999), 42(11), 1053-1060
 CODEN: JLCRD4; ISSN: 0362-4803
 PUBLISHER: John Wiley & Sons Ltd.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The synthesis and anal. of [14C]NVP VID400 (I), a specific vitamin D3-hydroxylase inhibitor, is reported. The key intermediate is (R)-2-amino-1-phenyl-[1-14C]ethanol, synthesized in an effective, enantioselective approach using a borane reduction of phenacyl chloride in the presence of a (R)-oxazaborolidine catalyst. The secondary isotope effect induced splitting of 13C-NMR signals enabled the quantification of the isotopic purity and thereby the specific activity of I.
 IT 174262-00-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of C-14 labeled NVP VID400)
 RN 174262-00-1 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, 4'-chloro-N-[(2R)-2-hydroxy-2-phenylethyl]- (9CI) (CA INDEX NAME)
 Absolute stereochemistry.



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 113 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 ACCESSION NUMBER: 1999:708752 HCAPLUS
 DOCUMENT NUMBER: 131:322921
 TITLE: Preparation of hydroxypropylamide peptidomimetics as inhibitors of aspartyl proteases
 INVENTOR(S): Dollé, Roland Ellwood, III; Cavallaro, Cullen Lee; Herpin, Timothee Felix
 PATENT ASSIGNEE(S): Pharmacopeia, Inc., USA
 SOURCE: PCT Int. Appl., 48 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

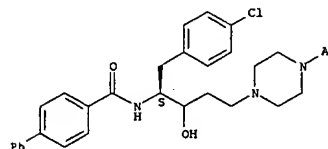
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 9955687 | A2 | 19991104 | WO 1999-US9070 | 19990427 |
| WO 9955687 | A3 | 20000224 | | |
| V: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 5986102 | A | 19991116 | US 1998-69380 | 19980429 |
| AU 9938684 | A1 | 19991116 | AU 1999-38684 | 19990427 |
| US 6191277 | B1 | 20010220 | US 1999-408237 | 19990929 |
| PRIORITY APPLN. INFO.: US 1998-69380 A 19980429 | | | | |
| WO 1999-US9070 W 19990427 | | | | |
| OTHER SOURCE(S): MARPAT 131:322921 | | | | |
| GI | | | | |



AB Comps. 2-NR2CHR1CH(OH)CH2CH2-Y [R1 = alkyl, -(CH2)n-cycloalkyl (n = 1-3), aralkyl; R2 = H or [S]-CO-L-, where [S] is a solid support and -L- is a linker; Y = O2CNR3 or NR4R5, where R3 is alkyl, aralkyl, aryl, or aryloxyalkyl and R4 and R5 are independently H, alkoxyalkyl, R3, COR3, SO2R3, 2-indanyl(CH2)m (m = 0-3) or R4R5N is morpholino or N-substituted 1-piperazinyl; Z = COR7, COCH(R)O2CNR3, COCH(R)NR3, where R7 is alkyl, aralkyl, aryl, -(CH2)m-cycloalkyl, heteroaryl, 1-(carboxy

L4 ANSWER 113 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 ester)-2-pyrrolidinyl, 2-indanyl-(CH2)n and R8 = H, alkyl, aralkyl, -(CH2)m-cycloalkyl were prepd. as inhibitors having activity against the aspartyl proteases plasmepsin and cathepsin D. Thus, compd. I was prepd. by the solid-phase method and shown to inhibit plasmepsin or cathepsin D at a concn. (IC50) of less than 350 micromolar.
 IT 248596-65-8P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of hydroxypropylamide peptidomimetics as inhibitors of aspartyl proteases)
 RN 248596-65-8 HCAPLUS
 CN D-glycero-Pentitol, 5-(4-acetyl-1-piperazinyl)-2-[[[1,1'-biphenyl]-4-ylcarbonyl]amino]-1-(4-chlorophenyl)-1,2,4,5-tetraoxy-, (3S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 114 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 ACCESSION NUMBER: 1999:566014 HCAPLUS
 DOCUMENT NUMBER: 131:185243
 TITLE: Phenylalanine derivatives as inhibitors of α4 integrins
 INVENTOR(S): Archibald, Sarah Catherine; Head, John Clifford; Watrelow, Graham John; Porter, John Robert
 PATENT ASSIGNEE(S): Celltech Therapeutics Limited, UK
 SOURCE: PCT Int. Appl., 53 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

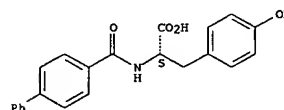
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 9943642 | A1 | 19990902 | WO 1999-GB589 | 19990226 |
| V: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SE, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 9932603 | A1 | 19990915 | AU 1999-32603 | 19990226 |
| EP 1056714 | A1 | 20001206 | EP 1999-936071 | 19990226 |
| EP 1056714 | B1 | 20040811 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| JP 2002504534 | T2 | 20020212 | JP 2000-533401 | 19990226 |
| US 6555562 | B1 | 20030429 | US 1999-258522 | 19990226 |
| AT 273273 | E | 20040815 | AT 1999-936071 | 19990226 |
| ES 2226413 | T3 | 20050316 | ES 1999-936071 | 19990226 |
| US 2003166691 | A1 | 20030904 | US 2003-379092 | 20030303 |
| US 2005215598 | A1 | 20050929 | US 2005-130531 | 20050517 |
| PRIORITY APPLN. INFO.: GB 1998-4161 A 19980226 | | | | |
| GB 1998-26668 A 19981203 | | | | |
| US 1999-258522 A1 19990226 | | | | |
| WO 1999-GB589 W 19990226 | | | | |
| US 2003-379092 B1 20030303 | | | | |

OTHER SOURCE(S): MARPAT 131:185243
 AB Phenylalanine derivs. p-[R1(Alk1)(L1)]C6H2R2Rb(Alk2)mCRR2NR3COA: [R is a carboxylic acid derivative; R1 = H, OH, alkoxy, (un)substituted cycloaliph., heterocycloaliph., polyheterocycloaliph., aromatic, or heteroarom. group; Alk1 = (un)substituted aliphatic or heteroaliph. chain; L1 is a linker group]

r, s = 0 or 1; Ra, Rb = -L2(CH2)pl3(Rc)q, where L2 or L3 is a bond or linker atom or group; p = 0 or 1; q = 1-3; Rc = H, halo, alkyl, OH, alkoxy, etc.; Alk2 = alkylene; m = 0 or 1; R2 = H, Me; R3 = H, alkyl; Ar is an optionally substituted aromatic group] were prepared for use as α4 integrin inhibitors. Thus, N-(2,6-dimethoxybenzoyl)-O-[(3,5-dichloro-4-pyridinyl)methyl]-L-tyrosine was prepared via alkylation/acylation of tert-butoxycarbonyl-L-tyrosine Me ester.

IT 240482-28-4
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (phenylalanine derivs. as inhibitors of α4 integrins)
 RN 240482-28-4 HCAPLUS
 CN L-Tyrosine, N-([1,1'-biphenyl]-4-ylcarbonyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 114 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 Absolute stereochemistry.



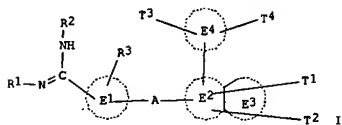
REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 115 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 1999:529128 HCAPLUS
 DOCUMENT NUMBER: 131:184864
 TITLE:

Preparation of amidinophenylcarbamoylbiphenyl derivatives and heterocyclic analogs thereof as inhibitors of blood coagulation factor VIIa
 Senokuchi, Kazuhiko; Ogawa, Koji
 Ono Pharmaceutical Co., Ltd., Japan
 PCT Int. Appl., 665 pp.
 CODEN: P1XX02

DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|-------------------|-----------------|------------|
| WO 9941231 | A1 | 19990819 | WO 1999-JP622 | 19990212 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TH | | | | |
| RW: GH, GM, KE, LS, MW, SD, SE, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 9923006 | A1 | 19990830 | AU 1999-23006 | 19990212 |
| EP 1078917 | A1 | 20010228 | EP 1999-902896 | 19990212 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| ZA 9901273 | A | 19990825 | ZA 1999-1273 | 19990217 |
| US 6358960 | B1 | 20020319 | US 2000-601998 | 20000811 |
| PRIORITY APPLN. INFO.: | | | JP 1998-76815 | A 19980217 |
| | | | WO 1999-JP622 | W 19990212 |
| OTHER SOURCE(S): | | MARPAT 131:184864 | | |
| GI | | | | |



AB The title compds. I [T1 = (R5)q; T2 = (R7)n; T3 = (R6)m; T4 = (R4)p; R1, R2 = H, alkoxy, carbonyl, etc.; a proviso is given; R3 = H, alkyl, etc.; ring E1 = unsatd. heterocyclic ring, etc.; ring E2 = unsatd. heterocyclic ring, etc.; ring E3 = unsatd. or saturated heterocyclic ring, etc.; ring E4 = unsatd. heterocyclic ring, etc.; R4, R5 = CO2R8, may be omitted; ring E4 = unsatd. heterocyclic ring, etc.; R4, R5 = CO2R8,

L4 ANSWER 116 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 1999:464267 HCAPLUS
 DOCUMENT NUMBER: 131:116517
 TITLE:

Preparation of N-acyl-phenylalanine derivatives as inhibitors of $\alpha 4$ -mediated cell adhesion
 Sircar, Ila; Gudmundsson, Kristjan S.; Martin, Richard
 Tanabe Seiyaku Co., Ltd., Japan
 PCT Int. Appl., 243 pp.
 CODEN: P1XX02

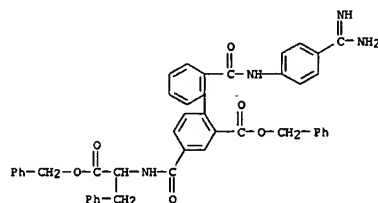
DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|-------------------|-------------------|-------------|
| WO 9936393 | A1 | 19990722 | WO 1999-US993 | 19990119 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW | | | | |
| RW: GH, GM, KE, LS, MW, SD, SE, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2318527 | A1 | 19990722 | CA 1999-2318527 | 19990119 |
| AU 9924584 | A1 | 19990802 | AU 1999-24584 | 19990119 |
| AU 749568 | B2 | 20020627 | | |
| BR 9907040 | A | 20001017 | BR 1999-7040 | 19990119 |
| EP 1049662 | A1 | 20001108 | EP 1999-904115 | 19990119 |
| EP 1049662 | B1 | 20060621 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY | | | | |
| JP 2002059131 | T2 | 20020326 | JP 2000-540111 | 19990119 |
| JP 3634749 | B2 | 20050330 | | |
| NZ 506081 | A | 20030228 | NZ 1999-506081 | 19990119 |
| TW 591007 | B | 20040611 | TW 1999-88100776 | 19990119 |
| SG 118147 | A | 20060127 | SG 2002-200204434 | 19990119 |
| US 6521666 | B1 | 20030218 | US 2000-619712 | 20000719 |
| US 2003191118 | A1 | 20031009 | US 2002-286777 | 20021104 |
| US 685843 | B2 | 20050215 | | |
| JP 2005002116 | A2 | 20050106 | JP 2004-202046 | 20040708 |
| PRIORITY APPLN. INFO.: | | | US 1998-71840P | P 19980120 |
| | | | JP 2000-540111 | A3 19990119 |
| | | | WO 1999-US993 | W 19990119 |
| | | | US 2000-619712 | A3 20000719 |
| OTHER SOURCE(S): | | MARPAT 131:116517 | | |
| GI | | | | |

AB The present invention relates to a pharmaceutical composition comprising as an active ingredient a compound of formula [I] wherein ring A is an aromatic or a heterocyclic ring; Q is a bond, carbonyl, lower alkylene optionally substituted by HO or Ph, lower alkenylene, or -O- (lower alkylene)-; n is 0, 1 or 2; Z is oxygen or sulfur; W is oxygen, sulfur, -CH=CH-, -NH- or -N=CH-; R1, R2 and R3 are the same or different and are hydrogen, halogen, hydroxyl, a substituted or unsubstituted lower alkyl group, a substituted or unsubstituted lower alkoxy group, a substituted or unsubstituted amino group, CO2H or an amide or an ester thereof, cyano, lower alkylthio, lower alkane-sulfonyl, substituted or unsubstituted SO2NH2, etc.; R4 is tetrazolyl, carbonyl group, amide or ester; R5 is hydrogen, nitro, amino,

L4 ANSWER 115 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN (Continued)
 etc.; R8 = H, alkyl, etc.; p, q = 0, or 1, 2; p + q = 1 or 2; R6, R7 = H, alkyl, etc.; m = 1 - 3; n = 1 - 3] are prepd. I are useful as preventives and/or remedies for various vascular lesions assoc. accelerated coagulation activity, for example, universal intravascular coagulation syndrome, coronary thrombosis, brain infarction, brain embolism, transient cerebral ischemic attack, diseases assoc. cerebral vascular disorders, deep vein thrombosis, peripheral embolism, thrombus formation following artificial blood vessel operation or artificial valve replacement, diseases assoc. postoperative thrombus formation, reobstruction and recontraction following coronary artery bypass, reobstruction and recontraction following PTCA or PTCR, thrombus formation during extracorporeal circulation and glomerulonephritis. Formulations contg. a compd. of this invention are given. In an in vitro test, 2-[2-(4-amidinophenylcarbamoyl)-6-methoxy-3-pyridyl]-5-[(1S)-hydroxymethyl-2,2-dimethylpropyl]carbamoyl]benzoic acid methanesulfonic acid salt showed IC50 of 0.013 μ M against factor VIIa.

IT RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (Preparation of amidinophenylcarbamoylbiphenyl derivs. and heterocyclic analogs thereof as inhibitors of blood coagulation factor VIIa)
 RN 239451-11-7 HCAPLUS
 CN [1,1'-Biphenyl]-2-carboxylic acid, 2'-[[[4-(aminomino-methyl)phenyl]amino]carbonyl]-4-[[[2-oxo-2-(phenylmethoxy)-1-(phenylmethyl)ethyl]amino]carbonyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

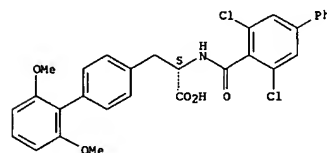


REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 116 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN (Continued)
 hydroxyl, lower alkanoyl, lower alkyl, etc.; R6 is selected from (a) a substituted or unsubstituted Ph group, (b) a substituted or unsubstituted pyridyl group, (c) a substituted or unsubstituted thienyl group, (d) a substituted or unsubstituted benzofuranyl group, etc.; or a pharmaceutically acceptable salt thereof]. These phenylalanine derivs. are useful for treating or preventing conditions caused by $\alpha 4$ -mediated cell adhesion such as rheumatoid arthritis, asthma, psoriasis, eczema, contact dermatitis and other skin inflammatory diseases, diabetes, multiple sclerosis, systemic lupus erythematosus (SLE), inflammatory bowel disease including ulcerative colitis and Crohn's disease, and other diseases involving leukocyte infiltration of the gastrointestinal tract, or other epithelial lined tissues, such as skin, urinary tract, respiratory airway, and joint synovium.
 N-(tert-butoxycarbonyl)-O-(trifluoromethylbenzenesulfonyl)-L-tyrosine Me ester (prepn. given) was coupled with 2-methoxybenzenesulfonyl acid in toluene/DMF in the presence of K2CO3 and Pd(PPh3)4 at 80 °C for 24 h to give N-(tert-butoxycarbonyl)-4-(2-methoxyphenyl)-L-phenylalanine Me ester. The latter compd. was treated with CF3CO2H in CH2Cl2 for 1.5 h to remove the Boc group and then condensed with 2,6-dichlorobenzoyl chloride in the presence of diisopropylethylamine at room temp. for 24 h to give N-(2,6-dichlorobenzoyl)-4-(2-methoxyphenyl)-L-phenylalanine Me ester (II) which was sapon. with LiOH in THF/MeOH at room temp. for 3 h, evapd., treated with H2O, adjusted pH 2, and exhd. with EtOAc to give N-(2,6-dichlorobenzoyl)-4-(2-methoxyphenyl)-L-phenylalanine (III). II and III in vitro inhibited at IC50 of 12 and 0.32 μ M, resp.
 B7-mediated cell adhesion which measured the adhesive interactions of a B-cell line, RPMI, known to express $\alpha 4 \beta 7$, to the alternatively spliced region of fibronectin referred to as CS-1, in the presence of test compds.

IT RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (Preparation of N-acyl-phenylalanine derivs. as inhibitors of $\alpha 4$ -mediated cell adhesion for prevention and treatment of diseases caused by $\alpha 4$ -mediated cell adhesion)
 RN 232274-75-8 HCAPLUS
 CN [1,1'-Biphenyl]-4-propanoic acid, α -[[[3,5-dichloro-1,1'-biphenyl]-4-yl]carbonyl]amino]-2',6'-dimethoxy-, (±)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 117 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1999:255446 HCAPLUS
 DOCUMENT NUMBER: 131:70224
 TITLE: Homology Modeling of Gelatinase Catalytic Domains and Docking Simulations of Novel Sulfonamide Inhibitors
 AUTHOR(S): Kiyama, Ryuichi; Tamura, Yoshinori; Watanabe, Fumihiko; Tsuzuki, Hiroshige; Ohtani, Mitsuaki; Yodo, Mitsuaki
 CORPORATE SOURCE: Shionogi Research Laboratories, Shionogi Company Ltd., Sagisu Fukushima-ku Osaka, 553-0002, Japan
 SOURCE: Journal of Medicinal Chemistry (1999), 42(10), 1723-1738
 CODEN: JMCMAR; ISSN: 0022-2623
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English

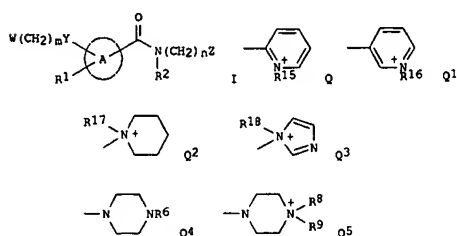
AB Three-dimensional models for the catalytic domain of gelatinases (MMP-9 and -2) have been constructed based on the X-ray crystal structure of MMP-3. Conformations of the loop segment which forms the bottom half of the S1' subsite but shows conformational diversity among the crystal structures of other MMPs have been explored by simulated annealing of each gelatinase model complexed with two highly potent "probe" inhibitors. Representative catalytic domain models have been selected for each gelatinase from the set of generated conformations based on shape complementarity of the loop to the probe inhibitors. The single model selected for MMP-9 was utilized to explain the structure-activity relationship of our novel sulfonamide inhibitors. Mol. dynamics (MD) simulations of the complex models revealed important features of the binding mechanism of our inhibitors: (i) the ligand carboxylate group coordinating to the catalytic zinc ion and hydrogen bonding to the Glu219 side chain, (ii) one of the sulfonyl oxygens forming hydrogen bonds with the main chain NHs (Leu191 and Ala192), (iii) the sulfonyl substituent making extensive hydrophobic contact with the S1' subsite. The gauche conformation exclusively adopted by the sulfonamide C-N-S-C torsion plays an important role in achieving the third binding feature by properly directing the substituent into the S1' subsite. Improvement of the inhibitory activity according to straight elongation of the sulfonyl substituent was attributed to an increase of the hydrophobic contact between the substituent and the S1' subsite. Structural modifications which alter the straight shape of the substituent lead to deterioration of the activity. On the other hand, the two candidate models selected for MMP-2 differ in the bottom shape of the S1' subsite: one with a channel-like subsite and the other with a pocket-like subsite resembling that of the MMP-9 model. The bottom shape was exptl. probed by chemical synthesis of inhibitors having elongated sulfonyl substituents whose terminal alkyl groups were shown by MD simulations to protrude from the S1' subsite bottom into the solvent. Gelatinase assays of these inhibitors showed that elongation of the substituent significantly reduces activity against MMP-9 while retaining activity against MMP-2, consequently increasing the selectivity between MMP-2 and -9. The results confirm that MMP-9 has a pocket-like S1' subsite with a floorboard and MMP-2 has a channel-like S1' subsite.

IT 229165-59-7
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study) (homol. modeling of gelatinase catalytic domains and docking simulations of novel sulfonamide inhibitors)

L4 ANSWER 118 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1999:206866 HCAPLUS
 DOCUMENT NUMBER: 130:291600
 TITLE: Amides, bone formation promoters containing them, and their use as antiosteoporotic agents
 INVENTOR(S): Shibata, Saizo; Omori, Fujimi; Nakagawa, Takashi
 PATENT ASSIGNEE(S): Japan Tobacco, Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 45 pp.
 CODEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|-------------------|-----------------|----------|
| JP 11080107 | A2 | 19990326 | JP 1997-251360 | 19970901 |
| PRIORITY APPLN. INFO.: | | | JP 1997-251360 | 19970901 |
| OTHER SOURCE(S): | | MARPAT 130:291600 | | |

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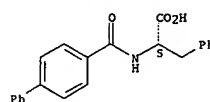


AB Bone formation promoters contain amides I [V = H, amino, NHCOR3 (R3 = lower alkyl), lower alkoxy, carbonyl, cycloalkyl, naphthyl, morpholino, thienyl, phthalimido, benzoyl, benzyloxy, C6H4R4 (R4 = H, halo, lower alkyl, lower alkoxy); Y = O, NHCOR2, NHCO, CONH, CO, CO2, OCO, CO(CH2)u (u = 1, 2), direct bond; ring A = benzene, naphthalene, cyclohexane, biphenyl, di-Ph ether, pyridine, isoxazole, thiophene; R1 = H, halo, NO2, lower alkyl, lower alkoxy; R2 = H, lower alkyl; Z = halo, OH, lower alkyl, lower alkoxy, lower alkoxy, carbonyl, carboxy, NR6 (R5, R6 = H, (hydroxy)alkyl, aryl, lower alkoxy, carbonyl), NR7R8R9 (R7, R8 = lower alkyl, aralkyl; R9 = lower alkyl, (halo)alkyl, aralkyl, aralkyl, SR10 (R10 = lower alkyl, aralkyl), SO2R11 (R11 = lower alkyl, aralkyl), SR12 (R12 = lower alkyl, aralkyl), SR13R14 (R13, R14 = lower alkyl), morpholino, pyridyl, pyridinyl, Q (R15 = lower alkyl), Q1 (R16 = lower alkyl), Q2 (R17 = lower alkyl), Q3 (R18 = lower alkyl); R2 and R5 may be bonded to each other to form Q4 (R6 = any group given above); R2 and R7 may be bonded to each other to form Q5 (R8, R9 = any group given above), m = 0-20; n = 0-4) or their pharmaceutically acceptable salts as active ingredients. Pharmaceutical compns. and antiosteoporotic agents containing

I or their salts are also claimed. N-[2-(dimethylamino)ethyl]4-

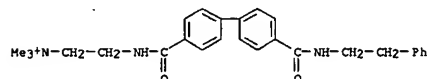
L4 ANSWER 117 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 RN 229165-59-7 HCAPLUS
 CN L-Phenylalanine, N-([1,1'-biphenyl]-4-ylcarbonyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



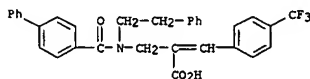
REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 118 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 (nonoxyl)benzamide hydrochloride (prepn. given) at 3 μM showed 244% osteoblast growth promoting activity.
 IT 222980-49-6P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of (hetero)aromatic amides as bone formation promoters for treatment of osteoporosis)
 RN 222980-49-6 HCAPLUS
 CN Ethanaminium, N,N,N-trimethyl-2-[[[4'-[(2-phenylethyl)amino]carbonyl][1,1'-biphenyl]-4-yl]carbonyl]amino]-, iodide (9CI) (CA INDEX NAME)



• I⁻

L4 ANSWER 119 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1999:46691 HCAPLUS
 DOCUMENT NUMBER: 130:222798
 TITLE: Polymer Bound 3-Hydroxy-2-methylenepropionic Acids. A Template for Multiple Core Structure Libraries
 AUTHOR(S): Richter, Hartmut; Walk, Tilmann; Hoeltzel, Alexandra; Jung, Guenther
 CORPORATE SOURCE: Institut fuer Organische Chemie, Eberhard-Karls-Universitaet Tuebingen, Tuebingen, D-72076, Germany
 SOURCE: Journal of Organic Chemistry (1999), 64(4), 1362-1365
 CODEN: JOCEAH; ISSN: 0022-3263
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 130:222798
 AB Polymer-bound 3-hydroxy-2-methylenepropionic acid derivs. were prepared from polymer-bound acrylic acid and aldehyde via a Baylis-Hillman reaction and further elaborated into a large number of different core compds.
 IT 221088-43-3P
 RI: SPN (Synthetic preparation); PREP (Preparation) (preparation of polymer-bound (hydroxy) (methylene)propanoates as template for multiple core structure libraries)
 RN 221088-43-3 HCAPLUS
 CN 2-Propenoic acid, 2-[[[(1,1'-biphenyl)-4-ylcarbonyl] (2-phenylethyl)amino]methyl]-3-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



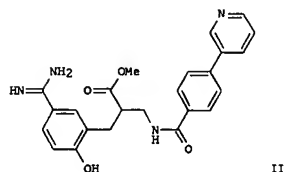
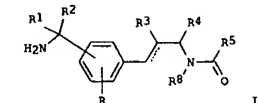
REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 120 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1999:34887 HCAPLUS
 DOCUMENT NUMBER: 130:110161
 TITLE: Preparation of substituted N-[(aminoiminomethyl or aminomethyl)phenyl]propyl amides as Factor Xa inhibitors
 INVENTOR(S): Klein, Scott I.; Guertin, Kevin R.; Spada, Alfred P.; Pauls, Heinz W.; Gong, Yong; McGarvey, Daniel G.
 PATENT ASSIGNEE(S): Rhone-Poulenc Rorer Pharmaceuticals Inc., USA
 SOURCE: PCT Int. Appl., 252 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 5
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|-------------|
| WO 9900356 | A1 | 19990107 | WO 1998-US13550 | 19980626 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW | | | | |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| US 6080767 | A | 20000627 | US 1997-884405 | 19970627 |
| CA 2264556 | AA | 19990107 | CA 1998-2264556 | 19980626 |
| AU 9881771 | A1 | 19990119 | AU 1998-81771 | 19980626 |
| AU 741173 | B2 | 20011122 | | |
| EP 951060 | A1 | 19990728 | EP 1998-931728 | 19980626 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO | | | | |
| BR 9806060 | A | 19990831 | BR 1998-6060 | 19980626 |
| JP 2001500532 | T2 | 20010116 | JP 1999-505870 | 19980626 |
| AP 1061 | A | 20020424 | AP 1999-1467 | 19980626 |
| W: GH, GM, KE, LS, MW, SD, SZ, UG, ZW | | | | |
| PL 191115 | B1 | 20060331 | PL 1998-331985 | 19980626 |
| NO 9900884 | A | 19990423 | NO 1999-854 | 19990223 |
| NO 314758 | B1 | 20030519 | | |
| US 6323227 | B1 | 20011127 | US 1999-259528 | 19990226 |
| HK 1022685 | A1 | 20060127 | HK 2000-101706 | 20000321 |
| PRIORITY APPLN. INFO.: | | | US 1997-884405 | A2 19970627 |
| | | | US 1996-9485P | P 19960102 |
| | | | WO 1996-US20770 | A2 19961223 |
| | | | WO 1998-US13550 | W 19980626 |

OTHER SOURCE(S): HARPAT 130:110161
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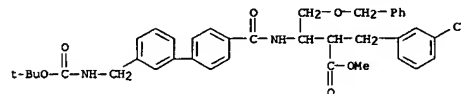
L4 ANSWER 120 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



AB Title compds. I [R = H, OH, NH2; R1 = R2 = H; or R1R2 = NR9; R3 = H, CO2R6, COR6, CON(R6)2, CH2OR7, CH2SR7; R4 = H, alkyl, alkyl-Q, thioheterocyclyl, (CH2CH2)nAr, (CH=CH)nAr, CH2Ar; R5 = alk(en/yn)yl, cycloalk(en)yl, heterocycl(en)yl, aryl, heteroaryl, fused systems, etc.; R6 = H, lower alkyl; R7 = H, lower alkyl, aralkyl, lower acyl, aroyl, heteroaroyl; R8 = H, lower alkyl; R9 = H, R10O2C, R10O, HO, cyano, R10CO, ORC, lower alkyl, O2N, Y1'Y2'N; R10 = alkyl, aralkyl, heteroaralkyl; Y1', Y2' = H, alkyl; Q = R7O, R7S, Y1Y2N; Y1, Y2 = H, alkyl, aryl, aralkyl; or one of Y1 and Y2 = acyl or aroyl and the other is as given; Ar = aryl or heteroaryl; n = 0-2] and their pharmaceutically acceptable salts, prodrugs, N-oxides, hydrates, and solvates, are useful as Factor Xa inhibitors. For example, 4-(pyridin-3-yl)benzoic acid was amidated with tert-Bu 3-aminopropionate-HCl via the acid chloride, and the resulting B-acylamino ester underwent a sequence of (1) α-alkylation with 5-iodo-2-[(2-methoxyethoxy)methoxy]benzyl bromide, (2) acidic deprotection of the MEM group, and conversion to the Me ester, (3) Pd-catalyzed cyanation of the iodide, and (4) Pinner reaction and ammonolysis of the nitrile, to give title compound II. Three example compds. showed Ki values of 19.0-94.0 nM in a Factor Xa assay, 46 nM to 1.72 μM in a trypsin assay, and 477 nM to 2.71 μM in a thrombin assay.

IT 219671-21-3
 RI: RCT (Reactant); RACT (Reactant or reagent) (intermediate; preparation of substituted [(aminoiminomethyl)- or [(aminomethyl)phenyl]propyl amides as Factor Xa inhibitors)
 RN 219671-21-3 HCAPLUS
 CN Benzenepropanoic acid, 3-cyano-α-[1-[[[3'-[[[(1,1-dimethylethoxy)carbonyl]amino]methyl][1,1'-biphenyl]-4-yl]carbonyl]amino]-2-(phenylmethoxy)ethyl]-, methyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 120 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



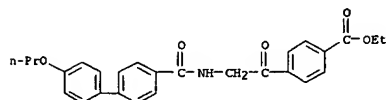
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 121 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1998:789168 HCAPLUS
 DOCUMENT NUMBER: 130:25351
 TITLE: Preparation of new echinocandide derivatives with antimicrobial activity
 INVENTOR(S): Hori, Yasuhiro; Tsurumi, Yasuhisa; Takase, Shigehiro; Hatanaka, Hiroshi; Sakamoto, Kazutoshi; Hashimoto, Seiji; Ohki, Hidenori; Tojo, Takashi; Matsuda, Keiji; Kawabata, Kohji
 PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan; et al.
 SOURCE: PCT Int. Appl., 91 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|------------|
| WO 9852967 | A1 | 19981126 | WO 1998-JP2168 | 19980518 |
| W: BR, CA, CN, JP, KR, US | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| EP 983297 | A1 | 20000308 | EP 1998-919630 | 19980518 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI | | | | |
| JP 2002502239 | T2 | 20020122 | JP 1998-550222 | 19980518 |
| US 6331521 | B1 | 20011218 | US 1999-423654 | 19991201 |
| PRIORITY APPLN. INFO.: | | | AU 1997-6918 | A 19970521 |
| | | | WO 1998-JP2168 | W 19980518 |

OTHER SOURCE(S): MARPAT 130:25351
 GI

L4 ANSWER 121 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 (Reactant or reagent)
 (prepn. of new echinocandide derivs. with antimicrobial activity)
 RN 216312-44-6 HCAPLUS
 CN Benzoic acid, 4-[[[4'-propoxy[1,1'-biphenyl]-4-yl]carbonyl]amino]acetyl]-, ethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

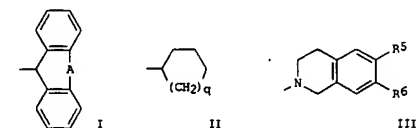
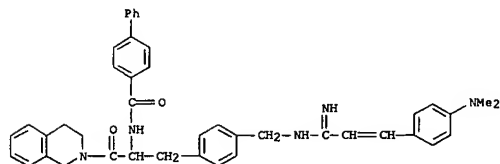
AB The invention relates to new echinocandide derivs. I [R1 = H, acyl; R2 = H, OH; R3 = H, Me; R4 = H, OH with the proviso that when R4 = OH, R2 = OH] or a salt thereof which have antimicrobial activities (especially antifungal activities), inhibitory activity on β -1,3-glucan synthase, to process for preparation thereof, to a pharmaceutical composition comprising the same, and to a method for the prophylactic and/or therapeutic treatment of infectious diseases including Pneumocystis carinii infection (e.g. Pneumocystis carinii pneumonia) in a human being or an animal. Thus, echinocandin derivative II [R = CO(CH2)3NMe] (WF 738B), isolated from a culture of Colophoma carteriformis Number 738, was deacylated by treatment with washed mycelium of Actinoplanes utahensis IFO-13244 to give deacyl derivative II (R = H). Acylation of II (R = H) with a variety of activated benzoic acid derivs. gave modified title compds., e.g. II [R = 4-COC6H4-X-C6H4O(CH2)nMe-4; X = bond, 1,4-piperazinediyl, 3,5-isoxazolidiyl, 1,3,4-thiadiazol-2,5-diyl, thiazol-5,2-diyl, thiazol-2,5-diyl; n = 2,4,5,7].
 IT 216312-44-6P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

L4 ANSWER 122 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1998:693420 HCAPLUS
 DOCUMENT NUMBER: 129:330479
 TITLE: Preparation of amidines as neuropeptide Y receptor antagonists and therapeutics for hyperphagia, etc.
 INVENTOR(S): Ito, Satoru; Sagara, Takeshi; Koito, Kiyota; Nishioka, Toru; Ouchi, Kenji; Fukuroda, Naohiro
 PATENT ASSIGNEE(S): Banyu Pharmaceutical Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
 CODEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| JP 10287637 | A2 | 19981027 | JP 1997-111837 | 19970414 |
| PRIORITY APPLN. INFO.: | | | JP 1997-111837 | 19970414 |

OTHER SOURCE(S): MARPAT 129:330479
 GI

L4 ANSWER 122 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

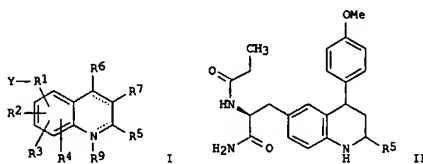


AB R1CONHC(COR3)XNHC(:NH)(CH2)n(CH:CH)2R2 [n = 0-6; p = 0-1; R1 = (CH2)m(CHAR2)kAr1 [Ar1, Ar2 = (un)substituted aryl; k = 0-1; m = 0-2], dibenzocyclyl I [A = direct bond, CH2, O, (lower alkyl-substituted) NH, S]; R2 = H, (un)substituted aryl, heterocyclyl, (un)substituted cycloimino II (q = 1-3); R3 = N(CH2)R4 [R = 0-2; R4 = (un)substituted aryl, heterocyclyl, II, III (R5, R6 = H, lower alkoxy); X = (CH2)t (t = 3-4), p-CH2C6H4(CH2)2 or their pharmaceutically acceptable salts are prepared. Prophylactic and therapeutic agents for hyperphagia, obesity, and diabetes contain \pm I or their salts. N-[DL-N-a-(p-biphenylacetyl)-N-m-(3-phenyl-1-imino-2-propenyl)lysyl]tetrahydroisoquinoline (preparation given) suppressed neuropeptide Y-induced feeding behavior.
 IT 215302-57-1P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of amidines as neuropeptide Y receptor antagonists for treatment of hyperphagia, obesity, and diabetes)
 RN 215302-57-1 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-[2-(3,4-dihydro-2(1H)-isoquinolinyl)-1-[[4-[[[3-(4-(dimethylamino)phenyl]-1-imino-2-propenyl]amino)methyl]phenyl]methyl]-2-oxoethyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 123 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 ACCESSION NUMBER: 1998:543220 HCAPLUS
 DOCUMENT NUMBER: 129:175563
 TITLE: 4-Substituted quinoline derivatives and 4-substituted quinoline combinatorial libraries
 INVENTOR(S): Hayes, Thomas K.; Forood, Behrouz; Kiely, John S.
 PATENT ASSIGNEE(S): Trega Biosciences, Inc., USA
 SOURCE: PCT Int. Appl., 124 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|-------------|
| WO 9834115 | A1 | 19980806 | WO 1997-US22391 | 19971205 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| CA 2279977 | AA | 19980806 | CA 1997-2279977 | 19971205 |
| AU 9881919 | A1 | 19980825 | AU 1998-81919 | 19971205 |
| EP 977989 | A1 | 20000209 | EP 1997-949775 | 19971205 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| US 6262269 | B1 | 20010717 | US 1998-17785 | 19980203 |
| US 638081 | B1 | 20020514 | US 1998-376670 | 19990816 |
| PRIORITY APPLN. INFO.: | | | US 1997-795392 | A 19970204 |
| | | | US 1997-126414P | P 19970204 |
| | | | WO 1997-US22391 | W 19971205 |
| | | | US 1998-17785 | A3 19980203 |

OTHER SOURCE(S): MARPAT 129:175563
 GI

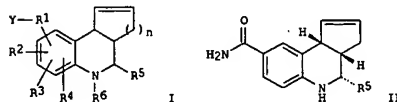


AB The invention relates to novel 4-substituted quinoline derivs. I, their

L4 ANSWER 124 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 ACCESSION NUMBER: 1998:543216 HCAPLUS
 DOCUMENT NUMBER: 129:175562
 TITLE: Tricyclic tetrahydroquinoline derivatives and tricyclic tetrahydroquinoline combinatorial libraries
 INVENTOR(S): Hayes, Thomas K.; Kiely, John S.
 PATENT ASSIGNEE(S): Trega Biosciences, Inc., USA
 SOURCE: PCT Int. Appl., 119 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 9834111 | A1 | 19980806 | WO 1997-US22206 | 19971205 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| US 5925527 | A | 19990720 | US 1997-795893 | 19970204 |
| CA 2279980 | AA | 19980806 | CA 1997-2279980 | 19971205 |
| AU 9855928 | A1 | 19980825 | AU 1998-55928 | 19971205 |
| NZ 337046 | A | 20000128 | NZ 1997-337046 | 19971205 |
| EP 983507 | A1 | 20000308 | EP 1997-952280 | 19971205 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| PRIORITY APPLN. INFO.: | | | US 1997-795893 | A 19970204 |
| | | | WO 1997-US22206 | W 19971205 |

OTHER SOURCE(S): MARPAT 129:175562
 GI



AB The invention relates to novel tricyclic tetrahydroquinoline compds. I, their salts, and combinatorial libraries containing mixts. of two or more such

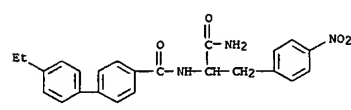
compds. [wherein R1 = bond, (un)substituted alk(en/yn)ylene, cycloalk(en)ylene, phenylene, naphthylene, heterocycle, heteroaryl, amino, CH2CONH, (CH2)2pAr(CH2)q, p, q = 0-6 but both cannot be 0; Ar = (un)substituted Ph or heteroaryl; R2, R3, R4 = H, halo, (un)protected OH, cyano, NO2, (un)substituted alk(en/yn)yl, alkoxy, cycloalk(en)yl, heterocyclyl, phenylalkyl, Ph, naphthyl, etc.; R5 = H, (un)substituted alk(en/yn)yl, cycloalk(en)yl, Ph, naphthyl, phenylalkyl, (un)protected CO2H, acyl, heterocyclyl, etc.; R6 = H, (un)substituted alkyl, phenylalkyl, acyl, PhSO2, alkylsulfonyl, alkylaminocarbonyl, PhNHCO; n = 1-3; Y = CO2H, OH, SH, NH2, CONHR7, CH2OH, CH2NH2, CH2NHR7; R7 = H,

salts, and combinatorial libraries contg. mixts. of two or more such compds. [wherein R1 = bond, (un)substituted alk(en/yn)ylene, cycloalk(en)ylene, phenylene, naphthylene, heterocycle, heteroaryl, amino, CH2CONH, (CH2)2pAr(CH2)q, etc.; p, q = 0-6 but both cannot be 0; Ar = (un)substituted Ph or heteroaryl; R2, R3, R4 = H, halo, (un)protected OH, cyano, NO2, (un)substituted alk(en/yn)yl, alkoxy, cycloalk(en)yl, heterocyclyl, phenylalkyl, Ph, naphthyl, etc.; R5 = H, (un)substituted alk(en/yn)yl, cycloalk(en)yl, Ph, naphthyl, phenylalkyl, (un)protected CO2H, acyl, heterocyclyl, etc.; R6 = H, (un)substituted Ph, naphthyl, 2-oxopyrrolidin-1-yl and higher homologs, (un)substituted NHCO; R7 = H, (un)substituted alkyl; Y = CO2H, OH, SH, NH2, CONHR8, CH2OH, CH2NH2, CH2NHR8; R8 = H, (un)substituted alkyl, or functionalized resin; R9 = H, (un)substituted alkyl, phenylalkyl, acyl, PhSO2, alkylsulfonyl, alkylaminocarbonyl, or PhNHCO, or is absent; dotted lines = optional pi bonds]. The invention also relates to the generation of such libraries. In 12 examples, libraries of I ranging in size from 2380 to 39,440 compds. were prepd. as mixed sublibraries. Data for control compds. (samples of individually known intermediates and products, cleaved from simultaneously processed control resins) are given for some examples. Both quinoline and tetrahydroquinoline libraries were prepd. For instance, tea-bags of MBHA resin were each coupled with L- or D-N-BOC-p-nitrophenylalanine, the BOC groups were removed from both, and the amino groups were each acylated with 170 carboxylic acids. The acylated, resin-bound products were mixed and reduced at the nitro group, and the amine product mixts. were condensed with 58 different aldehydes and cyclized with 4-methoxystyrene. Cleavage of the resin-bound products with HF gave mixed sublibraries of I. Individual control samples of products, such as II [R5 = 1-naphthyl, 2,3-difluorophenyl, cyclohexyl, etc.], were obtained by reactions of pure, resin-bound L-N-propanoyl-p-aminophenylalanine control samples with individual aldehydes and 4-methoxystyrene. Potential applications of I (no data) may include use as antibacterials, NMDA antagonists, or analgesics.

IT 211377-24-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (resin-cleavage control intermediate: preparation of tricyclic tetrahydroquinoline derivs. and combinatorial libraries)

RN 211377-24-1 HCAPLUS

CN [1,1'-Biphenyl]-4-carboxamide, N-[2-amino-1-[(4-nitrophenyl)methyl]-2-oxoethyl]-4'-ethyl- (9CI) (CA INDEX NAME)



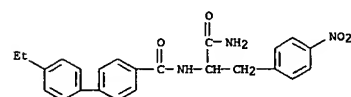
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 124 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 (un)substituted alkyl, or functionalized resin; R1 must be present and R5 = Ph when Y = CO2H]. The invention also relates to the generation of such libraries. In 2 examples, libraries of 2774 and approx. 17,000 compds. I were prepd. as mixed sublibraries. Data for control compds. (samples of individually known intermediates and products, cleaved from simultaneously processed control resins) are given. For instance, tea-bags of MBHA resin were each coupled with one of 19 aminobenzoic acids, such as 4-aminobenzoic acid. Diagnostic cleavage of each of these resins with HF gave 19 aminobenzoic controls in 34-99% yield. The 19 resins were mixed together and placed in new tea-bags, then condensed with 73 different aldehydes, and finally cyclized with cyclopentadiene. Cleavage of the resin-bound products with HF gave approx. 73 mixts. of 38 compds. (counting sep. enantiomers). Individual control samples of products, such as II [R5 = H, CH2Cl, cyclohexyl, CO2H, (un)substituted Ph, etc.], were typically obtained in 50-100% yield by reactions of pure, resin-bound 4-aminobenzoic acid control samples in sibling tea-bags. Potential applications of I (no data) may include use as antibacterials or analgesics.

IT 211377-24-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (resin-cleavage control intermediate: preparation of tricyclic tetrahydroquinoline derivs. and combinatorial libraries)

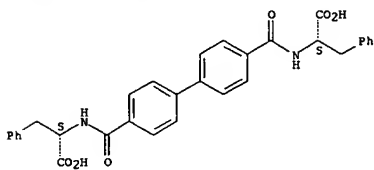
RN 211377-24-1 HCAPLUS

CN [1,1'-Biphenyl]-4-carboxamide, N-[2-amino-1-[(4-nitrophenyl)methyl]-2-oxoethyl]-4'-ethyl- (9CI) (CA INDEX NAME)

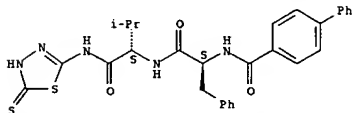


REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 125 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1998:430897 HCAPLUS
 DOCUMENT NUMBER: 129:68131
 TITLE: Chain-coupling reaction of amine-terminated oligomers by bis(4-monosubstituted-5(4H)oxazolinones)
 AUTHOR(S): Lefebvre, Herve; Fradet, Alain
 CORPORATE SOURCE: Lab. Synthèse Macromoléculaire, Univ. P. M. Curie, Paris, F-75252, Fr.
 SOURCE: Macromolecular Chemistry and Physics (1998), 199(5), 815-824
 CODEN: MCHPES; ISSN: 1022-1352
 PUBLISHER: Huethig & Wepf Verlag
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Bis(5(4H)oxazolinones) derived from naturally occurring α -amino acids were reacted with amine-terminated polyethers and polyamides in the bulk at 175-200°. Model reactions were also carried out using primary alkylamines. The reactions were studied by SEC, and 1H and 13C NMR, and the resulting polymers were characterized by DSC and TGA. The chain-coupling reaction is extremely fast and yields high-molar-mass copolymers containing peptide linkages in less than 5 min. The NMR spectra of model compds. and polymers were fully assigned, showing that the oxazolinone/amine polyaddn. reaction proceeds in the expected way, without any noticeable side reaction. The polymers exhibit lower crystallinity, higher Tg, and a melting temperature close to or lower than that of the starting oligomers.
 IT 209050-39-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (Preparation of acyl-bis(α -amino acid)s in oxazolinone chain coupling agent synthesis)
 RN 209050-39-5 HCAPLUS
 CN L-Phenylalanine, N,N'-([1,1'-biphenyl]-4,4'-diyl dicarbonyl)bis- (9CI) (CA INDEX NAME)
 Absolute stereochemistry.



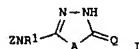
L4 ANSWER 126 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

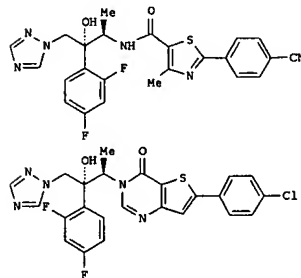
L4 ANSWER 126 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1998:405971 HCAPLUS
 DOCUMENT NUMBER: 129:81965
 TITLE: Preparation of peptidyl 5-amino-1,3,4-thiadiazole-2-thiones
 INVENTOR(S): Oleksyszyn, Jozef; Jacobson, Alan R.
 PATENT ASSIGNEE(S): Proscript, Inc., USA; Oleksyszyn, Jozef; Jacobson, Alan R.
 SOURCE: PCT Int. Appl., 97 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|------------------|-------------|
| WO 9825949 | A1 | 19980618 | WO 1997-US22534 | 19971209 |
| W: | AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TH | | | |
| RW: | GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | |
| AU 9856923 | A1 | 19980703 | AU 1998-56923 | 19971209 |
| PRIORITY APPLN. INFO.: | | | US 1996-762503 | A2 19961209 |
| | | | WO 1997-US22534 | W 19971209 |
| OTHER SOURCE(S): | | | MARPAT 129:81965 | |
| GI | | | | |



AB Aminothiadiazolethiones I (Q, A = S, O and one of Q and A is S; R1 = H, alkyl, acyl; Z is an organic radical that does not substantially interfere with matrix metalloproteinase inhibitory activity) were prepared. Thus, 5-[N-(4-(4-tert-butylphenylsulfonylamino)benzoyl)phenylalanylvalylamino]-1,3,4-thiadiazole-2-thione, prepared by acylation of 5-amino-1,3,4-thiadiazole-2-thione with the phenylalanylvaline derivative, was assayed for stromelysin inhibitory activity (IC50 = 44 nM).
 IT 186098-55-5P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (Preparation of peptidyl aminothiadiazolethiones)
 RN 186098-55-5 HCAPLUS
 CN L-Valinamide, N-([1,1'-biphenyl]-4-yl carbonyl)-L-phenylalanyl-N-(4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-yl)- (9CI) (CA INDEX NAME)
 Absolute stereochemistry.

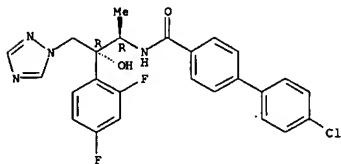
L4 ANSWER 127 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1998:269994 HCAPLUS
 DOCUMENT NUMBER: 128:278647
 TITLE: New Azole Antifungals. 2. Synthesis and Antifungal Activity of Heterocycliccarboxamide Derivatives of 3-Amino-2-aryl-1-azolyl-2-butanol
 AUTHOR(S): Bartolli, Javier; Turmo, Enric; Alguero, Monica; Boncompte, Eulalia; Vericat, Maria L.; Conte, Lourdes; Rami, Joaquin; Merlos, Manuel; Garcia-Rafanell, Julian; Forn, Javier
 CORPORATE SOURCE: Research Center, J. Uriach Cia. S.A., Barcelona, 08026, Spain
 SOURCE: Journal of Medicinal Chemistry (1998), 41(11), 1855-1868
 CODEN: JMCMAR; ISSN: 0022-2623
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



AB A series of 92 azole antifungals containing an amide alc. unit was synthesized. The nature and substitution of the amide portion was systematically modified in search of improved antifungal activity, especially against filamentous fungi. The compds. were tested in vitro against a variety of clin. important pathogens and in vivo (po) in a murine candidosis model. Thiadiazole and thiophene carboxamides carrying both a substituted Ph ring and a small alkyl group were best suited for activity against filamentous fungi. In a subset of these compds., the amide portion was conformationally locked by means of a pyrimidine ring and it was proven that only an orthogonal orientation of the Ph ring yields bioactive products. A tendency to display long plasma elimination half-lives was observed in both series. Two compds., I and 107, representative of the open and cyclic amides, resp., were chosen for further studies. Both candidates showed excellent activity in in vivo murine models of candidosis and aspergillosis, but their long elimination rates and high toxicities were still unsatisfactory. This work describes

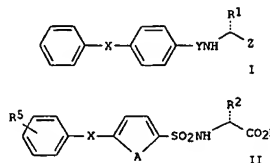
L4 ANSWER 127 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
the SARs found within this series. The next paper displays the results
obtained in a related series of compds., the quinazolinones.
IT 187998-14-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); BIOL (Biological
study); PREP (Preparation)
(synthesis and antifungal activity of heterocyclecarboxamide derivs. of
3-amino-2-aryl-1-azoly-2-butanol)
RN 187998-14-7 HCAPLUS
CN [1,1'-Biphenyl]-4-carboxamide, 4'-chloro-N-[2-(2,4-difluorophenyl)-2-
hydroxy-1-methyl-3-(1H-1,2,4-triazol-1-yl)propyl]-, [R-(R*,R*)]- (9CI)
(CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

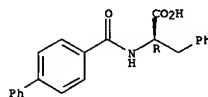
L4 ANSWER 128 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:66723 HCAPLUS
DOCUMENT NUMBER: 128:188290
TITLE: Highly Selective and Orally Active Inhibitors of Type
IV Collagenase (MMP-9 and MMP-2): N-Sulfonylamino Acid
Derivatives
AUTHOR(5): Tamura, Yoshinori; Vatanabe, Fumihiko; Nakatani,
Takui; Yasui, Ken; Fuji, Masahiro; Komurasaki,
Tadafumi; Tsuzuki, Hiroshige; Maekawa, Ryuji;
Yoshioka, Takayuki; Kawada, Kenji; Sugita, Kenji;
Ohtani, Mitsuaki
CORPORATE SOURCE: Shionogi Research Laboratories, Shionogi Co. Ltd.,
Osaka, 553, Japan
SOURCE: Journal of Medicinal Chemistry (1998), 41(4), 640-649
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



AB Various N-sulfonylamino acid derivs., e.g. I (R1 = PhCH2, X = bond, Y =
SO2, CO, Z = CONHOH, CO2H; R1 = indol-3-ylmethyl, X = bond, Y = SO2, Z =
CONHOH, CO2H; R1 = MeCH, X = O, Y = SO2, Z = CONHOH, CO2H) and II (R2 =
indol-3-ylmethyl, R5 = H, Me-4, OMe-3, A = CH:CH, X = bond; R2 =
indol-3-ylmethyl, R5 = Me-4, A = S, X = bond; R2 = CHMe2, R5 = OMe-4,
SMe-4, A = CH:CH, X = bond; R2 = CHMe2, R5 = OMe-4, A = S, X = bond; R2 =
indol-3-ylmethyl, R5 = H, Me-4, CO2H-4, A = CH:CH, X = C.tplbond.C; R2 =
indol-3-ylmethyl, R5 = NO2-2, NO2-4, Me-4, A = S, X = C.tplbond.C; R2 =
CHMe2, R5 = Me-4, A = CH:CH, S, X = C.tplbond.C; R2 = CH2Ph, R5 = OMe-4, A
= CH:CH, S, X = C.tplbond.C), were synthesized and evaluated for their in
vitro and in vivo activities to inhibit type IV collagenase (MMP-9 and
MMP-2). When the amino acid residue and the sulfonamide moiety were
modified, their inhibitory activities were greatly affected by the
structure of the sulfonamide moiety. A series of aryl sulfonamide derivs.
containing biaryl, tetrazole, amide, and triple bond were found to be potent
and highly selective inhibitors of MMP-9 and MMP-2. In addition, these
compds. were orally active in animal models of tumor growth and
metastasis. These results revealed the potential of the N-sulfonylamino
acid derivs. as a new type of candidate drug for the treatment of cancer.
IT 203639-68-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological

L4 ANSWER 128 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT
(Reactant or reagent); USES (Uses)
(prepn. of N-sulfonylamino acid derivs. as orally active type IV
collagenase inhibitors)
RN 203639-68-3 HCAPLUS
CN D-Phenylalanine, N-([1,1'-biphenyl]-4-ylcarbonyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

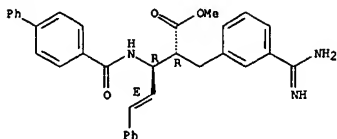


REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 129 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:66713 HCAPLUS
DOCUMENT NUMBER: 128:136097
TITLE: Identification and Initial Structure-Activity
Relationships of a Novel Class of Nonpeptide
Inhibitors of Blood Coagulation Factor Xa
AUTHOR(5): Klein, Scott I.; Czekaj, Mark; Gardner, Charles J.;
Guertin, Kevin R.; Cheney, Daniel L.; Spada, Alfred
P.; Bolton, Scott A.; Brown, Karen; Colussi, Dennis;
Haran, Christopher L.; Morgan, Suzanne R.; Leadley,
Robert J.; Dunwiddie, Christopher T.; Perrone, Mark
H.; Chu, Valeria
CORPORATE SOURCE: Departments of Cardiovascular Drug Discovery and New
Leads Generation, Rhone-Poulenc Rorer, Collegeville,
PA, 19426, USA
SOURCE: Journal of Medicinal Chemistry (1998), 41(4), 437-450
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The discovery and some of the basic structure-activity relationships of a
series of novel nonpeptide inhibitors of blood coagulation Factor Xa is
described. These inhibitors are functionalized β -alanines,
exemplified by benzoylstyryl- β -alanine Me ester (I). Docking expts.
placing I in the active site of factor Xa implied that the most
expedient route to enhancing in vitro potency was to modify the group
occupying the S3 site of the enzyme. Increasing the hydrophobic contacts
between the inhibitor and the enzyme in this region led to
phenylbenzoyl- β -alanine Me ester, which has served as the prototype
for this series. In addition, an enantioselective synthesis of these
substituted β -alanines was also developed.
IT 202208-22-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and identification and MSBAR of nonpeptide inhibitors of
blood coagulation factor Xa)
RN 202208-22-8 HCAPLUS
CN Benzenepropanoic acid, 3-(aminomimomethyl)- α -[1-([1,1'-biphenyl]-4-
ylcarbonyl)amino]-3-phenyl-2-propenyl-, methyl ester, [R*,R*-(E)]-,
mono(trifluoroacetate) (9CI) (CA INDEX NAME)
CH 1
CRN 193151-17-6
CHF C33 H31 N3 O3

Relative stereochemistry.
Double bond geometry as shown.

L4 ANSWER 129 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



CH 2

CRN 76-05-1

CMF C2 H P3 O2



REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 130 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:543463 HCAPLUS
DOCUMENT NUMBER: 127:136073

TITLE: Preparation of substituted N-[(aminoiminomethyl or aminomethyl)phenyl]propyl amides as factor Xa inhibitors

INVENTOR(S): Guertin, Kevin R.; Klein, Scott I.; Spada, Alfred P.
PATENT ASSIGNEE(S): Rhone-Poulenc Rorer Pharmaceuticals Inc. USA;

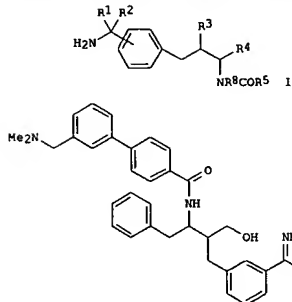
SOURCE: Guertin, Kevin R.; Klein, Scott I.; Spada, Alfred P.
PCT Int. Appl., 166 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 9724118 | A1 | 19970710 | WO 1996-US20770 | 19961223 |
| W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN | | | | |
| RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| CA 2241904 | AA | 19970710 | CA 1996-2241904 | 19961223 |
| CA 2241904 | C | 20041221 | | |
| AU 9715207 | A1 | 19970728 | AU 1997-15207 | 19961223 |
| AU 723338 | B2 | 20000824 | | |
| CN 1208347 | A | 19990217 | CN 1996-199894 | 19961223 |
| EP 906094 | A1 | 19990407 | EP 1996-945304 | 19961223 |
| EP 906094 | B1 | 20030625 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| BR 9612423 | A | 19991228 | BR 1996-12423 | 19961223 |
| JP 20000502710 | T2 | 20000307 | JP 1997-524560 | 19961223 |
| AP 861 | A | 20000801 | AP 1998-1288 | 19961223 |
| V: KE, LS, MW, SD, SZ, UG | | | | |
| PL 185460 | B1 | 20030530 | PL 1996-327633 | 19961223 |
| AT 243512 | E | 20030715 | AT 1996-945304 | 19961223 |
| PT 906094 | T | 20031128 | PT 1996-945304 | 19961223 |
| ES 2197257 | T3 | 20040101 | ES 1996-945304 | 19961223 |
| SK 284507 | B6 | 20050505 | SK 1998-897 | 19961223 |
| US 6080767 | A | 20000627 | US 1997-884405 | 19970627 |
| NO 9803039 | A | 19980902 | NO 1998-3039 | 19980630 |
| NO 310719 | B1 | 20010820 | | |
| BG 64143 | B1 | 20040227 | BG 1998-102619 | 19980710 |
| US 6140504 | A | 20001031 | US 2000-499335 | 20000204 |
| PRIORITY APPL. INFO.: | | | | |
| OTHER SOURCE(S): MARPAT 127:136073 | | | | |
| GI | | | | |

L4 ANSWER 130 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



II

AB Title compds. I [R1 = R2 = H; R1R2 = NR9; R3 = CO2R6, COR6, CONR62, CH2OR7, CH2SR7; R4 = H, alkyl, cycloalkyl, cycloalkylalkyl, (CH2CH2)nAr, (CH2CH)nAr, CH2Ar; R5 = alkyl, alkenyl, optionally substituted aryl, optionally substituted heteroaryl; R6 = H, lower alkyl; R7 = H, lower alkyl, lower acyl, aroyl, heteroaroyl; R8 = H, lower alkyl; R9 = R1002C, R100, HO, cyano, R10CO, OHC, lower alkyl, O2N, Y1Y2N; R10 = optionally substituted alkyl, optionally substituted aralkyl, optionally substituted heteroalkyl; Y1, Y2 = independently H, alkyl; Ar = optionally substituted aryl, optionally substituted heteroaryl; n = 0-2], a pharmaceutically acceptable salt thereof, N-oxide thereof, hydrate thereof, or solvate thereof, exhibit useful pharmacol. activity and accordingly are incorporated into pharmaceutical compns. and used in the treatment of patients suffering from certain medical disorders. More especially, they

are factor Xa inhibitors. The present invention is directed to compds. I, compns. containing compds. I, methods for their preparation and their use,

which are for treating a patient suffering from, or subject to, conditions which can be ameliorated by the administration of an inhibitor of factor Xa. Thus, compound II, prepared in several steps from Boc-D-Phe-OH,

3-NCC6H4CH2Br, and 3-(Me2NCH2)C6H3-p-C6H4CO2H showed Ki values of 27.0 nM, 1.27 μM, and 2.71 μM, in factor Xa, trypsin, and thrombin assays, resp.,

193151-17-6P

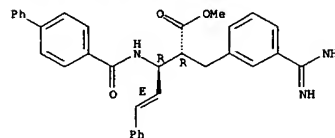
IT R1: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
[preparation of substituted (aminoiminomethyl)- or (aminomethyl)phenylpropyl amides as factor Xa inhibitors]

193151-17-6 HCAPLUS

RN Benzenepropanoic acid, 3-(aminoiminomethyl)-2-[(1R,2E)-1-[(1,1'-biphenyl]-4-ylcarbonyl)amino]-3-phenyl-2-propenyl]-, methyl ester, (aR)-rel- (SCI) (CA INDEX NAME)

L4 ANSWER 130 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

Relative stereochemistry.
Double bond geometry as shown.



L4 ANSWER 131 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1997:527636 HCAPLUS
 DOCUMENT NUMBER: 127:152958
 TITLE: Modified amino acid carriers, their preparation, and compositions containing them for delivering active agents
 INVENTOR(S): Leone-Bay, Andrea; Paton, Duncan R.; Ho, Koc-Kan; DeMorin, Frenel
 PATENT ASSIGNEE(S): Emisphere Technologies, Inc., USA
 SOURCE: U.S., 22 pp., Cont.-in-part of U.S. Ser. No. 231,622. CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 30
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|-------------|
| US 5643957 | A | 19970701 | US 1994-335148 | 19941025 |
| US 5451410 | A | 19950919 | US 1993-51019 | 19930422 |
| US 5792451 | A | 19980811 | US 1994-205511 | 19940302 |
| US 5629020 | A | 19970513 | US 1994-231622 | 19940422 |
| CA 2203033 | AA | 19960502 | CA 1995-220303 | 19951016 |
| WO 9612473 | A1 | 19960502 | WO 1995-0513527 | 19951016 |
| W: AL, AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ | | | | |
| RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CH, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9539633 | A1 | 19960515 | AU 1995-39633 | 19951016 |
| AU 711887 | B2 | 19991021 | | |
| EP 783299 | A1 | 19970716 | EP 1995-937558 | 19951016 |
| EP 783299 | B1 | 20030910 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | |
| BR 9510168 | A | 19971014 | BR 1995-10168 | 19951016 |
| HU 77759 | A2 | 19980728 | HU 1998-903 | 19951016 |
| JP 10507762 | T2 | 19950514 | JP 1995-514062 | 19951016 |
| AT 249422 | E | 20030915 | AT 1995-937558 | 19951016 |
| ES 2207655 | T3 | 20040601 | ES 1995-937558 | 19951016 |
| US 5955503 | A | 19990921 | US 1997-795833 | 19970206 |
| US 6100298 | A | 20000808 | US 1997-795837 | 19970206 |
| NO 9701889 | A | 19970623 | NO 1997-1889 | 19970424 |
| FI 9701776 | A | 19970425 | FI 1997-1776 | 19970425 |
| US 2001003001 | A1 | 20010607 | US 2000-730156 | 200001205 |
| AU 771024 | B2 | 20040311 | AU 2000-72261 | 20001214 |
| AU 771434 | B2 | 20040325 | AU 2000-72260 | 20001214 |
| US 2002120009 | A1 | 20020829 | US 2002-90012 | 20020221 |
| US 6663887 | B2 | 20031216 | | |
| US 2004068013 | A1 | 20040408 | US 2003-677906 | 20031001 |
| AU 2004202745 | A1 | 20040923 | AU 2004-202745 | 20040623 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | US 1993-51019 | A2 19930422 |
| | | | US 1994-205511 | A2 19940302 |
| | | | US 1994-231622 | A2 19940422 |
| | | | WO 1994-US4560 | A2 19940422 |
| | | | US 1994-335148 | A 19941025 |

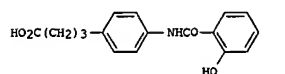
L4 ANSWER 132 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1997:307687 HCAPLUS
 DOCUMENT NUMBER: 126:293356
 TITLE: Preparation of phenylamide compounds as cytokine inhibitors
 INVENTOR(S): Haruta, Junichi; Sakuma, Kazuhiko; Watanabe, Yoshihiro
 PATENT ASSIGNEE(S): Japan Tobacco Inc., Japan
 SOURCE: FCT Int. Appl., 203 pp. CODEN: FIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|-------------|
| WO 9708133 | A1 | 19970306 | WO 1996-JP2305 | 19960815 |
| W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, KE, KG, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN | | | | |
| RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CH, GA, GN | | | | |
| CA 2230082 | C | 19970306 | CA 1996-2230082 | 19960815 |
| CA 2502764 | AA | 19970306 | CA 1996-2502764 | 19960815 |
| AU 9667095 | A1 | 19970319 | AU 1996-67095 | 19960815 |
| EP 849256 | A1 | 19980624 | EP 1996-927187 | 19960815 |
| EP 849256 | B1 | 20050608 | | |
| R: DE, FR, GB, IT | | | | |
| EP 1304322 | A2 | 20030423 | EP 2003-1681 | 19960815 |
| EP 1304322 | A3 | 20031119 | | |
| R: DE, FR, GB, IT | | | | |
| TW 410218 | B | 20001101 | TW 1996-85110115 | 19960819 |
| JP 09118658 | A2 | 19970506 | JP 1996-239796 | 19960821 |
| JP 2829599 | B2 | 19981125 | | |
| US 6174887 | B1 | 20010116 | US 1998-11983 | 19980220 |
| US 39088 | E | 20060502 | US 1998-342189 | 19980220 |
| US 6420561 | B1 | 20020716 | US 2000-714435 | 20000117 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | JP 1995-213855 | A 19950822 |
| | | | CA 1996-2230082 | A3 19960815 |
| | | | EP 1996-927187 | A3 19960815 |
| | | | WO 1996-JP2305 | W 19960815 |
| | | | US 1998-11983 | A3 19980220 |

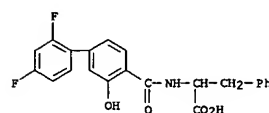
OTHER SOURCE(S): MARPAT 126:293356
 GI For diagram(s), see printed CA issue.
 AB The title compds. [I: R1 =, R2 =, R3 =, R4 =, R5 =, R6 = R = NH2, (un)substituted alkoxy or alkylamino, etc.; A = (un)substituted alkylene, etc.; X = O, S, etc.; M = arylene, cycloalkylene, heterocyclyl, etc.; R1, R2, R3, R4 = H, OH, halo, (un)substituted alkyl, aralkyloxy, etc.; R5 = H, alkyl, etc.; m = 0-6; R6 = optionally substituted aryl or cycloalkyl, etc.; R7 = H, optionally substituted alkyl or aryl, etc.] and pharmaceutically acceptable salts thereof are prepared, exhibiting excellent inhibitory effects on cytokines (IL-8, IL-1, IL-6, TNF, GM-CSF, etc.) relating directly or indirectly to inflammation, are useful in the prevention or treatment of arthritis caused by rheumatic diseases, gout, etc. Thus, benzoic acid (II) was reacted with L-phenylalanine.HCl in the presence of VSC.HCl, HOBT, and Et3N, and followed by treatment with aqueous HCl to give the title compound (III). III showed IC50 of 0.002, 0.008, and 0.009 μ M against IL-1 β , TNF, and IL-8 resp. when tested on human in vitro.

L4 ANSWER 131 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 WO 1995-US13527 W 19951016
 US 1997-795837 A1 19970206
 AU 1998-62756 A3 19980206
 US 1999-346970 A1 19990702
 AU 2000-730156 A1 20001205
 AU 2000-72260 A3 20001214
 US 2002-90012 A1 20020221

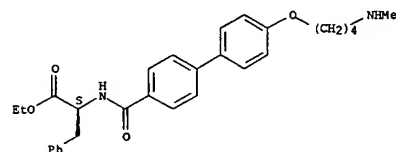
OTHER SOURCE(S): MARPAT 127:152958
 GI



AB Modified amino acid compds. useful in the delivery of active agents (peptides, carbohydrates, antigens, monoclonal antibodies, hormones, pesticides, etc.) are provided. Methods of administration and preparation are also provided. The effect of a composition containing e.g. interferon- α 2 and e.g. I (preparation given) on the serum interferon level was determined
 IT 193272-08-1P
 RL: AGR (Agricultural use); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
 RN 193272-08-1 HCAPLUS
 CN Phenylalanine, N-[(2',4'-difluoro-3-hydroxy[1,1'-biphenyl]-4-yl)carbonyl]- (9CI) (CA INDEX NAME)



L4 ANSWER 132 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 IT 188792-53-2P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 RN 188792-53-2 HCAPLUS
 CN L-Phenylalanine, N-[(4'-[4-(methylanino)butoxy][1,1'-biphenyl]-4-yl)carbonyl]-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)
 Absolute stereochemistry.

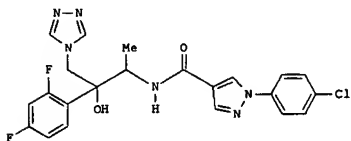


● HCl

L4 ANSWER 133 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1997:226815 HCAPLUS
 DOCUMENT NUMBER: 126:212156
 TITLE: Preparation of heteroarylcarboxamides as agrochemical and medical fungicides
 INVENTOR(S): Bartolli, Javier; Turmo, Enric; Anguita, Manuel
 PATENT ASSIGNEE(S): J. Utiach & Cia. S.A., Spain
 SOURCE: PCT Int. Appl., 84 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 9705131 | A1 | 19970213 | WO 1996-EP3419 | 19960802 |
| W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LX, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE | | | | |
| RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM | | | | |
| ES 2107376 | A1 | 19971116 | ES 1995-1564 | 19950802 |
| ES 2107376 | B1 | 19980701 | | |
| BR 9606546 | A | 19980714 | BR 1996-6546 | 19950802 |
| ES 2112774 | A1 | 19980401 | ES 1995-2042 | 19951020 |
| ES 2112774 | B1 | 19990516 | | |
| CA 2201478 | AA | 19970213 | CA 1996-2201478 | 19960802 |
| AU 9667889 | A1 | 19970226 | AU 1996-67889 | 19960802 |
| EP 783502 | A1 | 19970716 | EP 1996-928404 | 19960802 |
| R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | |
| JP 10507205 | T2 | 19980714 | JP 1996-507253 | 19960802 |
| US 5888941 | A | 19990330 | US 1997-809815 | 19970331 |
| NO 9701471 | A | 19970530 | NO 1997-1471 | 19970401 |
| PRIORITY APPLN. INFO.: | | | ES 1995-1564 | A 19950802 |
| | | | ES 1995-2042 | A 19951020 |
| | | | WO 1996-EP3419 | W 19960802 |

OTHER SOURCE(S): MARPAT 126:212156
 GI



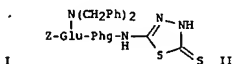
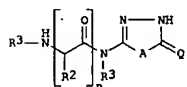
II

AB RCH2CR5(OR4)CR1R2NR3COZ1(CH2)mZ2(CH2)qR6 [I; R = imidazolo or

L4 ANSWER 134 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1997:105321 HCAPLUS
 DOCUMENT NUMBER: 126:118205
 TITLE: Preparation of 5-amino-1,3,4-thiadiazole amino acid and peptide amides as inhibitors for matrix metalloproteinases
 INVENTOR(S): Oleksyszyn, Josef; Jacobson, Alan R.
 PATENT ASSIGNEE(S): Osteoarthritis Sciences, Inc., USA; Oleksyszyn, Josef; Jacobson, Alan R.
 SOURCE: PCT Int. Appl., 68 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 9640745 | A2 | 19961219 | WO 1996-US9095 | 19960606 |
| WO 9640745 | A3 | 19970130 | | |
| W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LX, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG | | | | |
| RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA | | | | |
| US 5677282 | A | 19971014 | US 1995-473143 | 19950607 |
| CA 2224113 | AA | 19961219 | CA 1996-2224113 | 19960606 |
| AU 9660496 | A1 | 19961230 | AU 1996-60496 | 19960606 |
| EP 845002 | A2 | 19980603 | EP 1996-918174 | 19960606 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| JP 11506784 | T2 | 19990615 | JP 1996-501497 | 19960606 |
| ZA 9604830 | A | 19970609 | ZA 1996-4830 | 19960607 |
| PRIORITY APPLN. INFO.: | | | US 1995-473143 | A 19950607 |
| | | | WO 1996-US9095 | W 19960606 |

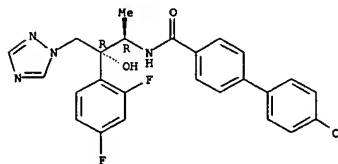
OTHER SOURCE(S): MARPAT 126:118205
 GI



AB Title amino acid and peptide amides I [Q, A = independently S, O, with at least one Q, A being S; n = pos. integer; R1 = H, lower alkyl, acyl; each R2 = independently (un)substituted C1-10 straight or branched alkyl, C3-8 cycloalkyl, C1-10 straight or branched alkenyl, C1-10 straight or branched alkynyl; aryl, heteroaryl; R3 = amine protecting group, physiol. active salt] are disclosed. These compds. inhibit matrix metalloproteinase enzymes and cartilage degradation. Methods of treating diseases caused by over-activity of matrix metalloproteinases, such as osteoarthritis and rheumatoid arthritis, are also disclosed. Thus, coupling of Z-Glu(N(CH2Ph)2)-Phe-OH (Z = PhCH2O2C; Phg = phenylglycine) with

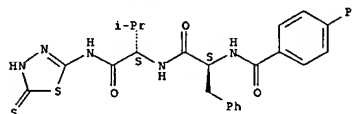
L4 ANSWER 133 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 1,2,4-triazolo-1-yl; R1 = alkyl; R2 = H or alkyl; R1R2 = alkylene; R3 = H (halo)alkyl, Ph, etc.; R4 = H; R3R4 = CH2, CH2CH2, CH(OH)CH2, COCH2; R5 = (halo) or CF3-substituted Ph; R6 = (un)substituted Ph, -heterocyclyl; Z1 = (un)substituted phenylene or -heterocyclylene; Z2 = bond, O, SOO-2, NR6; m, q = 0-2] were prepd. Thus, (2R,3R)-3-amino-2-(2,4-difluorophenyl)-1-(1H-1,2,4-triazol-1-yl)-2-butanol was amidated by 1-(4-chlorophenyl)-1H-pyrazole-4-carboxylic acid (prepn. given) to give title compd. (R,R)-II. Data for biol. activity of I were given.
 IT 187998-14-7P
 RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of heteroarylcarboxamides as agrochem. and medical fungicides)
 RN 187998-14-7 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, 4'-chloro-N-[2-(2,4-difluorophenyl)-2-hydroxy-1-methyl-3-(1H-1,2,4-triazol-1-yl)propyl]-, [(R)-(R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L4 ANSWER 134 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 5-amino-1,3,4-thiadiazole-2-thiol gave peptide thiadiazolylamide II. II inhibited stromelysin with Ki = 19 nM in a competitive inhibition assay.
 IT 186098-55-5
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (preparation of aminothiadiazolethione amino acid and peptide amides as matrix metalloproteinase inhibitors)
 RN 186098-55-5 HCAPLUS
 CN L-Valinamide, N-([1,1'-biphenyl]-4-ylcarbonyl)-L-phenylalanyl-N-(4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-yl)- (9CI) (CA INDEX NAME)

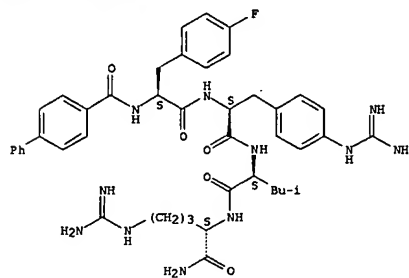
Absolute stereochemistry.



L4 ANSWER 135 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 1996:681493 HCAPLUS
 DOCUMENT NUMBER: 126:42242
 TITLE: Development of Potent Thrombin Receptor Antagonist Peptides
 AUTHOR(S): Bernatowicz, Michael S.; Klimas, Clifford E.; Hartl, Karen S.; Peluso, Marianne; Allegretto, Nick J.; Seiler, Steven M.
 CORPORATE SOURCE: Bristol-Myers Squibb Pharmaceutical Research Institute, Princeton, NJ, 08543, USA
 SOURCE: Journal of Medicinal Chemistry (1996), 39(25), 4879-4887
 CODEN: JMCMAH; ISSN: 0022-2623
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB A peptide-based structure-activity study is reported leading to the discovery of novel potent thrombin receptor antagonists. Systematic substitution of nonproteogenic amino acids for the 2nd and 3rd residues of the human thrombin receptor tethered ligand sequence (SFLLR) led to a series of agonists with enhanced potency. The most potent pentapeptide agonist identified was Ser-p-fluorophenyl-p-guanidinophenyl-Leu-Arg-NH₂ (I) (EC₅₀ .apprx.0.04 μM for stimulation of human platelet aggregation, .apprx.10-fold more potent than the natural pentapeptide). Systematic substitution of the NH₂-terminal Ser in I with neutral hydrophobic NH₂-acyl groups led to partial agonists and eventually antagonists with unprecedented potency (>1000-fold increase over the previously reported antagonist 3-mercaptopropionyl-Phe-Cha-Cha-Arg-Lys-Pro-Asn-Asp-Lys-NH₂). In the series of NH₂-acyl tetrapeptide antagonists, N-trans-cinnamoyl-p-fluorophenyl-p-guanidinophenyl-Leu-Arg-NH₂ (II) was identified as the tightest binding (IC₅₀ .apprx.8 nM) and most potent with an IC₅₀ .apprx.0.20 μM for inhibition of SFLLR-NH₂-stimulated platelet aggregation. Systematic single substitutions in (II) indicated that, in addition to the NH₂-terminal acyl group, the side chains at the 2nd and 3rd positions were also responsible for important and specific receptor interactions. The p-fluorophenyl and p-guanidinophenyl residues in the 2nd and 3rd positions of II were observed to be optimal in both the agonist and antagonist series. In the case of antagonists, however, an appropriately positioned pos. charged group (i.e., protonated base) at the 3rd residue was required. In contrast, such a substitution was not required for potent agonist activity. An even more potent antagonist resulted when II was extended at the C-terminus by a single Arg residue giving rise to analog BMS-200261 (III) which had an IC₅₀ .apprx.20 nM for inhibition of SFLLR-NH₂-stimulated platelet aggregation. When the C-terminal Arg of III was replaced by an Orn(N⁸-propionyl) residue, the resulting antagonist (BMS-200661) was suitable for use in radioligand binding assays (K_d = 10-30 nM). Antagonist activity observed for selected compds. was verified through secondary assays in that these analogs prevented SFLLR-NH₂-stimulated GTPase activity in platelet membranes and Ca²⁺ mobilization in cultured human smooth muscle cells and mouse fibroblasts. Furthermore, this inhibition occurred at concns. that had no effect on thrombin catalytic activity, indicating a specific activity attributable to receptor binding and not enzyme inhibition.
 IT 185028-16-4P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

L4 ANSWER 135 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN (Continued)
 (development of potent thrombin receptor agonist and antagonist peptides)
 RN 185028-16-4 HCAPLUS
 CN L-Argininamide, N-([1,1'-biphenyl]-4-ylcarbonyl)-4-fluoro-L-phenylalanine-4-yl)-[aminoiminomethyl]amino]-L-phenylalanine-L-leucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

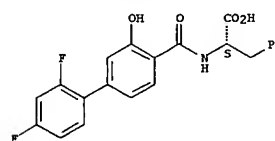
L4 ANSWER 136 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 1996:425385 HCAPLUS
 DOCUMENT NUMBER: 125:96071
 TITLE: Modified amino acids as absorption enhancers for delivering active agents
 INVENTOR(S): Leone-Bay, Andrea; Paton, Duncan R.; Ho, Kok-Kan; Demorin, Frenel
 PATENT ASSIGNEE(S): Enisphere Technologies, Inc., USA
 SOURCE: PCT Int. Appl., 57 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 30
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|-------------|
| WO 9612473 | A1 | 19960502 | WO 1995-US13527 | 19951016 |
| W: AL, AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ | | | | |
| RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CH, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| US 5643957 | A | 19970701 | US 1994-335148 | 19941025 |
| AU 9539633 | A1 | 19960515 | AU 1995-39633 | 19951016 |
| AU 711887 | B2 | 19991021 | | |
| EP 783299 | A1 | 19970716 | EP 1995-937558 | 19951016 |
| EP 783299 | B1 | 20030910 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | |
| BR 9510168 | A | 19971014 | BR 1995-10168 | 19951016 |
| JP 10507762 | T2 | 19980728 | JP 1995-514062 | 19951016 |
| AT 249422 | E | 20030915 | AT 1995-937558 | 19951016 |
| NO 9701889 | A | 19970623 | NO 1997-1889 | 19970424 |
| FI 9701776 | A | 19970425 | FI 1997-1776 | 19970425 |
| AU 771024 | B2 | 20040311 | AU 2000-72261 | 20001214 |
| AU 771434 | B2 | 20040325 | AU 2000-72260 | 20001214 |
| AU 2004202745 | A1 | 20040923 | AU 2004-202745 | 20040623 |
| PRIORITY APPLN. INFO.: | | | US 1994-335148 | A 19941025 |
| | | | US 1993-51019 | A2 19930422 |
| | | | US 1994-205511 | A2 19940302 |
| | | | US 1994-231622 | A2 19940422 |
| | | | WO 1995-US13527 | W 19951016 |
| | | | AU 1998-62756 | A3 19980206 |
| | | | AU 2000-72260 | A3 20001214 |

AB Modified amino acid compds. as absorption enhancers are useful in the delivery of active agents. These compound are used as carriers to facilitate the delivery of a cargo to a target. Thus, 47.00 g acetylsalicyloyl chloride was added to a mixture of 50.00 g 4-(4-aminophenyl)butyric acid in 300 mL of 2M aqueous sodium hydroxide and the reaction was stirred at 25° for 2 h, then it was acidified with aqueous HCl to obtain a precipitate which was separated and washed to give 31.89 g 4-(2-hydroxyphenylcarbonylamino)p-phenylbutanoic acid (I). I was mixed with interferon α-2 (II) in Tris-HCl buffer pH = 7-8 and was orally administered to rats at a rate of 300 mg 1/kg and 1000 μg 11/kg. The mean peak serum level of II was 8213 as compared to 688 ng/mL for controls.
 IT 178559-10-9P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological

L4 ANSWER 136 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN (Continued)
 study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (modified amino acids as absorption enhancers for delivering active agents)
 RN 178559-10-9 HCAPLUS
 CN L-Phenylalanine, N-[(2',4'-difluoro-3-hydroxy[1,1'-biphenyl]-4-yl)carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 137 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 ACCESSION NUMBER: 1996:171795 HCAPLUS
 DOCUMENT NUMBER: 124:232062
 TITLE: Preparation of amide group-containing cholecystokinin and gastrin receptor antagonists
 INVENTOR(S): Kalindjian, Sarkis Barret; Buck, Ildiko Maria; Dunstone, David John; Steel, Katherine Isobel Mary
 PATENT ASSIGNEE(S): James Black Foundation Ltd., UK
 SOURCE: PCT Int. Appl., 38 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 9530647 | A1 | 19951116 | WO 1995-GB997 | 19950502 |
| W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LA, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TW, TT | | | | |
| RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9523171 | A1 | 19951129 | AU 1995-23171 | 19950502 |
| GB 2303369 | A1 | 19970219 | GB 1996-23674 | 19950502 |
| GB 2303369 | B2 | 19980527 | | |
| ZA 9503739 | A | 19961111 | ZA 1995-3739 | 19950509 |
| US 9539437 | A | 19990817 | US 1996-737317 | 19961220 |
| | | | GB 1994-9150 | A 19940509 |
| | | | WO 1995-GB997 | W 19950502 |

PRIORITY APPL. INFO.:

OTHER SOURCE(S):

MARPAT 124:232062

GI For diagram(s), see printed CA issue.

AB The title compds. [I: Ar = (un)substituted monocyclic aromatic group; R1 = halogen, amino, nitro, cyano, sulfamoyl, sulfonyl, CF3, alkyl, alkylamino, dialkylamino, (un)substituted Ph, etc.; m = 0-4, provided that m is not more than 2 unless R1 is halogen; x + y = 0 or 1; R2, R4 = H, alkyl, etc.; R3 = H, (un)substituted C1-15 hydrocarbyl; R5 = H, C1-3 alkyl; U = (un)substituted aryl, (un)substituted heterocyclic, substituted heterocyclic, cycloalkyl; Z = (un)substituted heterocyclo, (un)substituted (phenylalkyl)amino or phenylamino], useful as cholecystokinin and gastrin receptor antagonists, are prepared. Thus, [15-(3,5-dicarboxyphenylaminocarbonyl)-2-phenylethylaminocarbonyl]-2-(1-adamantanemethylaminocarbonyl)benzene di-N-methyl-D-glucamine salt, prepared in 8 steps from 5-nitroisophthalic acid, demonstrated a CCKB receptor pKi of 7.1.

IT 174604-60-5P

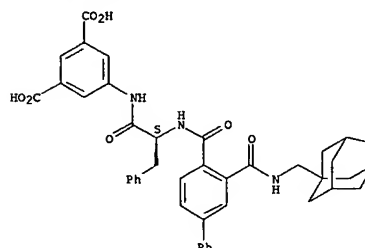
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of amide group-containing cholecystokinin and gastrin receptor antagonists)

RN 174604-60-5 HCAPLUS

CN 1,3-Benzenedicarboxylic acid, 5-[[1-oxo-3-phenyl-2-[[[3-

L4 ANSWER 137 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 [[(tricyclo[3.3.1.1.3,7]dec-1-ylmethyl)amino]carbonyl][1,1'-biphenyl]-4-yl]carbonyl]amino]propyl]amino]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 138 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1996:150231 HCAPLUS
 DOCUMENT NUMBER: 124:202254
 TITLE: Preparation of acylated (aminoalkyl)imidazole and -triazole inhibitors of 25-hydroxyvitamin D3 hydroxylase
 INVENTOR(S): Schuster, Ingeborg; Egger, Helmut
 PATENT ASSIGNEE(S): Sandoz Ltd., Switz.; Sandoz Patent-GmbH; Sandoz-Erfindungen Verwaltungsgesellschaft m.B.H.
 SOURCE: Eur. Pat. Appl., 17 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

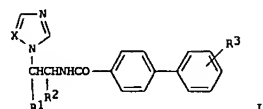
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| EP 683156 | A1 | 19951122 | EP 1995-810325 | 19950516 |
| EP 683156 | B1 | 19980401 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE | | | | |
| CA 2149459 | AA | 19951119 | CA 1995-2149459 | 19950516 |
| FI 9502383 | A | 19951119 | FI 1995-2383 | 19950516 |
| FI 112364 | B1 | 20031128 | | |
| NO 9501944 | A | 19951120 | NO 1995-1944 | 19950516 |
| AU 9520089 | A1 | 19951123 | AU 1995-20089 | 19950516 |
| AU 696880 | B2 | 19980924 | | |
| US 5622982 | A | 19970422 | US 1995-442053 | 19950516 |
| AT 164576 | E | 19980415 | AT 1995-810325 | 19950516 |
| ES 2114289 | T3 | 19980516 | ES 1995-810325 | 19950516 |
| CZ 285385 | B6 | 19990714 | CZ 1995-1265 | 19950516 |
| IL 113743 | A1 | 19990817 | IL 1995-113743 | 19950516 |
| SK 280326 | B6 | 19991108 | SK 1995-635 | 19950516 |
| RU 2152933 | C2 | 20000720 | RU 1995-107652 | 19950516 |
| JP 08053422 | A2 | 19960227 | JP 1995-118345 | 19950517 |
| JP 2912566 | B2 | 19990628 | | |
| HU 72063 | A2 | 19960328 | HU 1995-1451 | 19950517 |
| CN 1120039 | A | 19960410 | CN 1995-106034 | 19950517 |
| CN 1060163 | B | 20010103 | | |
| BR 9502062 | A | 19960430 | BR 1995-2062 | 19950517 |
| ZA 9504074 | A | 19961118 | ZA 1995-4074 | 19950518 |
| | | | GB 1994-9882 | A 19940518 |

PRIORITY APPL. INFO.:

OTHER SOURCE(S):

MARPAT 124:202254

GI



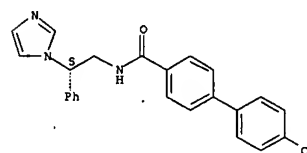
AB The title compds. [I: R1 = (un)substituted Ph, (un)substituted naphthyl, (un)substituted thienyl, (un)substituted pyridyl and R2 = H, or R1 = H, and R2 = 2-(5-chloropyridyl); R3 = H, halogen, alkyl, CN, alkoxy, carbonyl, (un)substituted NH2; X = N, CH] [e.g., 1-(5-chloro-2-pyridyl)-2-(1H-

L4 ANSWER 138 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 imidazol-1-yl)-N-(4-(4-chlorophenyl)benzoyl)-1-aminoethane; m.p. 175-186°], useful as selective inhibitors of the 25-hydroxyvitamin D3 hydroxylases (e.g., I IC50 = 0.01-10 μM) in the treatment of disorders (e.g., psoriasis, arthritis, hair regeneration, tumor inhibition, etc.) of proliferation and differentiation in vitamin D-responsive tissues, are prep.
 IT 174262-09-0P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of acylated (aminoalkyl)imidazole and -triazole inhibitors of 25-hydroxyvitamin D3 hydroxylase)

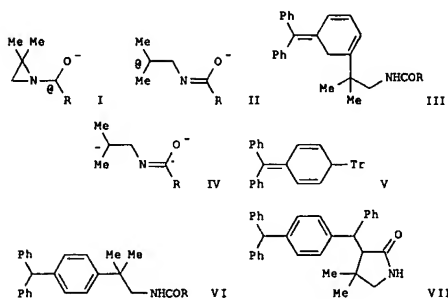
RN 174262-09-0 HCAPLUS

CN [1,1'-Biphenyl]-4-carboxamide, 4'-chloro-N-[(2S)-2-(1H-imidazol-1-yl)-2-phenylethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

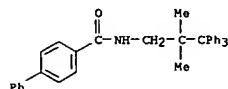


L4 ANSWER 139 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1996:10572 HCAPLUS
 DOCUMENT NUMBER: 124:201370
 TITLE: Aziridines. 68. Three positional isomers of substituted triphenylmethanes from reactions of trityl anion with 1-acyl-2,2-dimethylaziridines
 AUTHOR(S): Werry, Juegen; Lin, Pen-Yuan; Assithianakis, Petros; Stamm, Helmut
 CORPORATE SOURCE: Fac. Pharmacy, Univ. Heidelberg, Heidelberg, D-69120, Germany
 SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1995), (24), 3103-10
 CODEN: JCPR84; ISSN: 0300-922X
 PUBLISHER: Royal Society of Chemistry
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI

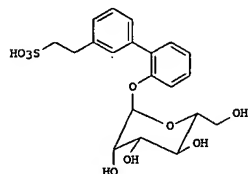


AB Ring opening of aziridines 4a-d in reactions with trityl anion Tr- proceeds exclusively by cleavage of the N-CMe2 bond. Substitution of the benzylic carbon of Tr- leads to 'central' products TrCMe2CH2NHCOR in yields of 0-54. This is ascribed to an SN2 reaction with borderline character, as is well known from reactions of aziridines 4a-d with other nucleophiles. All remaining ring-opening reactions result from single-electron transfer (SET). This is direct SET from Tr- to aziridines 4a-c. For compound 4d (acyl = cinnamoyl), the SET reaction is of the inner-sphere type and proceeds via Michael addition, at least in part. Homolytic ring opening of the generated aziridino ketyl I forms the tertiary amidalkyl radicals II. Main reaction of radicals II is transfer of a hydrogen atom from one of its two Me groups to the generated trityl radical Tr-. Methallylamides and enamides are the final products.

L4 ANSWER 139 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 Ortho-Substituted triphenylmethanes 12 and/or its olefinic precursors III arise in .apprx.20% yield. A mechanism for the formation of these unique products is proposed that first converts the radicals II into the corresponding carbanions IV which undergo an SN2' reaction with one allylic system TrCHCH:CH' of the dimer V of Tr-. The leaving group Tr- is eliminated from this partial structure when carbanions IV attack the marked carbon converting it finally into the substituted ortho carbon of compds. 12. Addn. of radicals 6 to Tr- is probably the way to the para-substituted triphenylmethanes VI, which arise in yields of only 0-1% from aziridines 4a,b (acyl = benzoyl, pivaloyl). Higher yields of para-substituted compds. VI are obtained from aziridines 4c (acyl = 4-phenylbenzoyl) and 4d. This is ascribed, at least for substrate 4c, to a chain reaction because ketyl I from 4c must be formed more rapidly than ketyl I from 4a,b. A substantial part of radical II from 4d cyclizes, ending up as the triphenylmethane compd. VII that carries a pyrrolidone ring in the para position.
 IT 132381-76-1P
 RL: PNU (Preparation, unclassified); PREP (Preparation)
 (three positional isomers of substituted triphenylmethanes from reactions of trityl anion with 1-acyl-2,2-dimethylaziridines)
 RN 132381-76-1 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-(2,2-dimethyl-3,3,3-triphenylpropyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 140 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1995:965070 HCAPLUS
 DOCUMENT NUMBER: 124:146671
 TITLE: Rational Design and Synthesis of Small Molecule, Non-oligosaccharide Selectin Inhibitors: (α-D-Mannopyranosyloxy)biphenyl-Substituted Carboxylic Acids
 AUTHOR(S): Kogan, Timothy P.; Dupre, Brian; Keller, Karin M.; Scott, Ian L.; Bul, Huang; Market, Robert V.; Beck, Pamela J.; Voytus, Jennifer A.; Revell, B. Mitch; Scott, Delores
 CORPORATE SOURCE: Departments of Medicinal Chemistry, Texas Biotechnology Corporation, Houston, TX, 77030, USA
 SOURCE: Journal of Medicinal Chemistry (1995), 38(26), 4976-84
 CODEN: JMCHAR; ISSN: 0022-2623
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



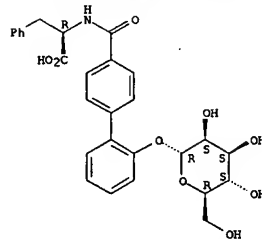
AB The calcium dependent E-selectin/sialyl Lewisx (sLex) interaction plays a key role in inflammation where it mediates the rolling of leukocytes prior to firm adhesion and extravasation from the vasculature. A model of E-selectin/sLex binding, along with previously reported structure-activity relationships of sLex-related oligosaccharide, was used in the rational design of non-oligosaccharide inhibitors of this pivotal interaction. A palladium-mediated biaryl-coupling (Suzuki) reaction was used as the key step to prepare a number of substituted biphenyls which were assayed for their

ability to inhibit the binding of E-, P-, and L-selectin-IgG fusion proteins to sLex expressed on the surface of HL60 cells. Some of the compds., e.g. I, developed had greater in vitro potency than the parent sLex tetrasaccharide and are currently being evaluated in in vivo models of inflammation to select a candidate for clin. development.

IT 171905-48-9
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
 (synthesis of small mol. non-oligosaccharide mannopyranosyloxybiphenyl carboxylic acids)
 RN 171905-48-9 HCAPLUS
 CN D-Phenylalanine, N-[[2'-(α-D-mannopyranosyloxy)[1,1'-biphenyl]-4-yl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 140 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

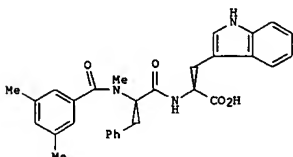


L4 ANSWER 141 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1995:88781 HCAPLUS
 DOCUMENT NUMBER: 123:340965
 TITLE: Preparation of dipeptide analogs as endothelin receptor antagonists.
 INVENTOR(S): Saika, Hideyuki; Murata, Toshiki; Pitterna, Thomas; Frueh, Thomas; Svensson, Lene D.; Urade, Yoshihiro; Yamamura, Takaki; Okada, Toshikazu
 PATENT ASSIGNEE(S): Japatt Ltd., Switz.; Ciba-Geigy Japan Ltd.
 SOURCE: PCT Int. Appl., 115 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 9512611 | A1 | 19950511 | WO 1994-EP3418 | 19941017 |
| W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, JP, KG, KP, KR, KZ, LK, LR, LT, LV, MD, MG, MN, NO, NZ, PL, RO, RU, SI, SK, TJ, TT, UA, US, UZ, VN | | | | |
| RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| CA 2173875 | AA | 19950511 | CA 1994-2173875 | 19941017 |
| AU 9478565 | A1 | 19950523 | AU 1994-78565 | 19941017 |
| AU 691201 | B2 | 19980514 | | |
| EP 728145 | A1 | 19960828 | EP 1994-929557 | 19941017 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | |
| BR 9407933 | A | 19961126 | BR 1994-7933 | 19941017 |
| JP 09504302 | T2 | 19970428 | JP 1994-512982 | 19941017 |
| RU 2126418 | C1 | 19990220 | RU 1996-112148 | 19941017 |
| ZA 9408541 | A | 19950502 | ZA 1994-8541 | 19941031 |
| FI 9601804 | A | 19960430 | FI 1996-1804 | 19960426 |
| NO 9601725 | A | 19960429 | NO 1996-1725 | 19960429 |
| US 5780498 | A | 19980714 | US 1996-637720 | 19960430 |

PRIORITY APPL. INFO.: EP 1993-810760 A 19931101
 WO 1994-EP3418 W 19941017

OTHER SOURCE(S): MARPAT 123:340965
 GI



I

L4 ANSWER 142 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1995:810934 HCAPLUS
 DOCUMENT NUMBER: 124:56563
 TITLE: Preparation of biphenyl monosaccharide glycosides as inhibitor of binding of E-selectin or P-selectin to sialyl Lewis x or sialyl-Lewis a
 INVENTOR(S): Kogan, Timothy P.; Dupre, Brian; Scott, Ian L.; Keller, Karin; Dao, Huong; Beck, Pamela J.
 PATENT ASSIGNEE(S): Texas Biotechnology Corporation, USA
 SOURCE: U.S., 23 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

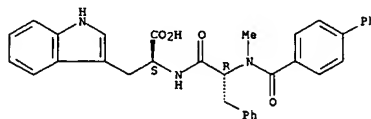
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|----------|
| US 5444050 | A | 19950822 | US 1994-235293 | 19940429 |
| CA 2189013 | AA | 19951109 | CA 1995-2189013 | 19950428 |
| WO 9529682 | A1 | 19951109 | WO 1995-US5463 | 19950428 |
| W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT | | | | |
| RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9524329 | A1 | 19951129 | AU 1995-24329 | 19950428 |
| AU 691920 | B2 | 19980528 | | |
| EP 758243 | A1 | 19970219 | EP 1995-918365 | 19950428 |
| EP 758243 | B1 | 20030312 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | |
| CN 1151117 | A | 19970604 | CN 1995-193539 | 19950428 |
| BR 9507561 | A | 19970805 | BR 1995-7561 | 19950428 |
| JP 09512560 | T2 | 19971216 | JP 1995-528493 | 19950428 |
| AT 234102 | E | 20030315 | AT 1995-918365 | 19950428 |
| NO 9604566 | A | 19961230 | NO 1996-4566 | 19961028 |
| TW 457246 | B | 20011001 | TW 1996-85115658 | 19961219 |

PRIORITY APPL. INFO.: US 1994-235293 A 19940429
 WO 1995-US5463 W 19950428

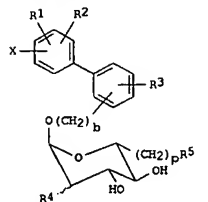
OTHER SOURCE(S): MARPAT 124:56563
 GI

L4 ANSWER 141 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 AB R1CONR2CH(CR3AR311)C(X)YCHR4R5 [R1 = alkyl, cycloalkylalkyl, aralkyl, cycloalkyl, aryl, arylcycloalkyl, alkoxy, aryloxy, heteroaryl; R2 = H, alkyl, cycloalkyl, aralkyl, cycloalkylalkyl; R3, R31 = H, alkyl, cycloalkyl, aralkyl, aryl, heteroaryl; R3R31 = atoms to form a ring; R311 = H, alkyl, aryl; R2R311 = (CH2)n, (CH2)pAr; n = 1, 2, 3; p = 0, 1, 2; Ar = (hetero)arylene; X = O, S, NH, NHOH, CH2, etc.; Y = bond, O, CH2, imino; or X = (H, OH) and Y = bond, CH2; R4 = (CH2)sAr1; s = 0, 1, 2, 3; Ar1 = (hetero)aryl; R5 = H, carboxy, (substituted) carboxamido, PO(OH)2, tetrazolyl, CH2OH, CN], were prepared. Thus, title compound (I), prepared by solution phase means, inhibited endothelin-3 induced contraction of guinea pig trachea with pA2 = 6.3. Drug formulations containing I are given.
 IT 169545-08-8P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of dipeptide analogs as endothelin receptor antagonists)
 RN 169545-08-8 HCAPLUS
 CN L-Tryptophan, N-[N-([1,1'-biphenyl]-4-ylcarbonyl)-N-methyl-D-phenylalanyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 142 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



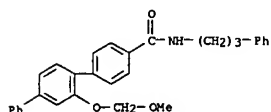
I

AB The title compds. [I: X = (CH2)nCO2H, O(CH2)mCO2H, (CH2)nO(CH2)mCO2H, CONH(CH2)mCO2H, CH(O2)CO2H, CH(2)CO2H, (CH2)nSO3H, (CH2)nPO3D102, NH(CH2)mCO2H, CONH(CHR6)CO2H, 1-H-tetrazolyl-5-alkyl, OH; R1, R2 = H, alkyl, halo, O2, NO2, NH2, NH2; R3 = H, halo, alkyl, O2, NH2; R4 = H, halo, alkyl, OH, hydroxyl-O-sulfate, O2; R5 = HO, cyano, N3, NH2, NNNH2, NE1E2, NH2E1, NHCO(CH2)nCO2H, S(CH2)mCO2H, NHCHNHNH2; R6 = H, alkyl, aralkyl, hydroxyalkyl, aminoalkyl, alkyl, carboxylic acid, alkyl carboxamide; wherein n = 0-6; m = 1-6; p = 0-6; b = 0-2; Z = alkyl, aryl or aralkyl; D1, D2 = H, alkyl; E1 = alkyl, (CH2)8CO2H; E2 = alkyl] and the pharmaceutically acceptable salts, esters, amides, and prodrugs thereof are prepared. This invention also relates to methods of inhibiting the binding of E-selectin and/or P-selectin to sialyl-Lewis x or sialyl-Lewis a presented on a cell surface using said compds. and to pharmaceutically active compds. comprising compds. that inhibit the binding of E-selectin to sialyl-Lewis x and to methods of treatment of septic shock, adult respiratory distress syndrome (ARDS), Crohn's disease, chronic inflammatory diseases, such as psoriasis and rheumatoid arthritis, and reperfusion injuries that occur following heart attacks, strokes and organ transplants (no data). Thus..

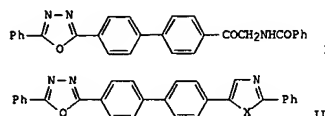
IT 171905-48-9P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of biphenyl monosaccharide glycosides as inhibitors of binding of E-selectin or P-selectin to sialyl-Lewis x or sialyl-Lewis a)
 RN 171905-48-9 HCAPLUS
 CN O-Phenylalanine, N-([2'-(α-D-mannopyranosyloxy)[1,1'-biphenyl]-4-yl]carbonyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

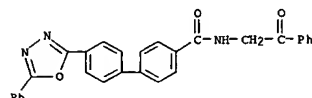
L4 ANSWER 144 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
 BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of biphenylcarboxylates as antiproliferatives)
 RN 161398-99-9 HCAPLUS
 CN [1,1':4',1''-Terphenyl]-4-carboxamide, 2'-(methoxymethoxy)-N-(3-phenylpropyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 145 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1994:270247 HCAPLUS
 DOCUMENT NUMBER: 120:270247
 TITLE: Synthesis of luminophoric derivatives of PBD based on 2,5-diaryl-substituted thiazoles and oxazoles
 AUTHOR(S): Lhotak, Pavel; Kurfurst, Antonin
 CORPORATE SOURCE: Dep. Org. Chem., Prague Inst. Chem. Technol., Prague, 166 28, Czech Rep.
 SOURCE: Collection of Czechoslovak Chemical Communications (1993), 58 (11), 2720-8
 CODEN: CCCCAK; ISSN: 0010-0765
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 120:270247
 GI



AB Bifluorophoric systems formed by combining two simple fluorophoric fragments, i.e., diaryloxadiazoles and diaryloxa(thia)zoles were prepared. Thus, Friedel-Crafts acylation of 2-(biphenyl-4-yl)-5-phenyl-1,3,4-oxadiazole (PBD) with hippuryl chloride gave I which on cyclization with POC13 or P4S10 gives the resp. oxazole (or thiazole) derivative of PBD, II
 (X = O, S).
 IT 154532-12-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction of, in preparation of luminophoric derivs.)
 RN 154532-12-4 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-(2-oxo-2-phenylethyl)-4'-(5-phenyl-1,3,4-oxadiazol-2-yl)- (9CI) (CA INDEX NAME)

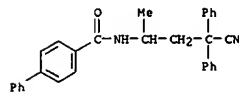


L4 ANSWER 146 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1993:494784 HCAPLUS
 DOCUMENT NUMBER: 119:94784
 TITLE: Aziridines. 59. Regioselectivity in nucleophilic ring opening of 2-methylaziridines. Lag of bond making as model for the abnormal opening
 AUTHOR(S): Lin, Pen Yuan; Bentz, Gunther; Stamm, Helmut
 CORPORATE SOURCE: Fac. Pharm., Univ. Heidelberg, Heidelberg, Germany
 SOURCE: Journal fuer Praktische Chemie/Chemiker-Zeitung (1993), 335 (1), 23-34
 CODEN: JPCCEM; ISSN: 0941-1216
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



AB The regioselectivity ratio RS = normal:abnormal opening of activated 2-methylaziridines I (R = acyl, tosyl, H, Ph, etc.) by nucleophiles is found to range from 0.10 to unmeasurable large (only normal opening = substitution at CH2 by strongly basic carbanions). RS is assumed to result from SN2 variants differing in the degree to which bond breaking is ahead of bond making including perhaps synchronous SN2. Bond breaking will be more ahead for the N-OMe bond. High nucleophilic power pushes bond making toward a synchronous process resulting in great RS. The decrease in RS with acyl activation relative to sulfonyl activation is in accord with a flattening of the nitrogen pyramid (planarization effect). The planarization effect is retained in acidic medium by O-protonation: RS 0.10-0.14 for methanolysis as compared to RS 0.43 for N-protonated sulfonylaziridine I (R = tosyl). AM1 calcs. support the planarization hypothesis. No indication for SET with trityl anion was found.

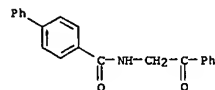
IT 149046-93-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 149046-93-5 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-(3-cyano-1-methyl-3,3-diphenylpropyl)- (9CI) (CA INDEX NAME)



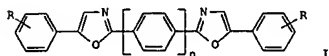
L4 ANSWER 147 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1993:472352 HCAPLUS
 DOCUMENT NUMBER: 119:72352
 TITLE: Method of synthesis of 1,4-dichloro-1,4-diarylbuta-1,3-diene aza derivatives
 INVENTOR(S): Ponomarev, Oleg A.; Grif, Vitalij Kh; Semenov, Sergej V.; Sogokon, Aleksandr B.
 PATENT ASSIGNEE(S): Kh g univ im.a.m.gorkogo, USSR
 SOURCE: U.S.S.R. From: Izobreteniya 1992, (38), 78.
 CODEN: URXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Russian
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--------------------------|------|----------|-----------------|----------|
| SU 1768588 | A1 | 19921015 | SU 1989-4804873 | 19891031 |
| PRIORITY APPLN. INFO.: | | | | |
| SU 1989-4804873 19891031 | | | | |

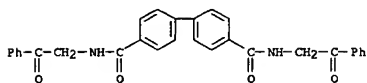
AB An improved process for synthesis of 4-RC6H4CCl:NX:CClC6H4R1-4 (where for R = H and X = N, R1 = H, Me, OMe, Cl, NMe2, Ph; and for R = R1 = Me, OMe, NMe2, Cl, X = N; and for R = Ph, R1 = H, X = CH) via chlorination of 4-RC6H4CONXCO6H4R1-4 uses SOCl2 or C2O2Cl2 as chlorinating agent and solvent in 5:10 ratio, and the process is conducted with heating to 60-80° until cessation of liberation of gas.
 IT 37061-74-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (chlorination of, with oxalyl chloride or sulfonyl chloride)
 RN 37061-74-8 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-(2-oxo-2-phenylethyl)- (9CI) (CA INDEX NAME)



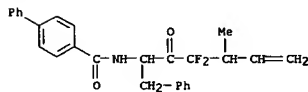
L4 ANSWER 148 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1993:408716 HCAPLUS
 DOCUMENT NUMBER: 119:8716
 TITLE: Bond-linked bisoxazoles. (II). Structures and optical properties of 4,4'-bis[2''-(5''-substituted phenyloxazolyl)]-1,1'-biphenyl and 5,5'-bis(dimethylphenyl)-2,2'-bioxazole
 AUTHOR(S): Wang, Mingzhen; Zhang, Wenqin; Gao, Zhenheng
 CORPORATE SOURCE: Dep. Chem., Nankai Univ., Tianjin, 300071, Peop. Rep. China
 SOURCE: Gaodeng Xuexiao Huaxue Xuebao (1992), 13(10), 1251-4
 CODEN: KTHPDM; ISSN: 0251-0790
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese
 GI



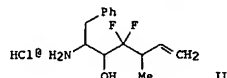
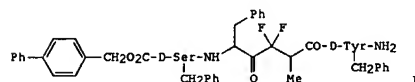
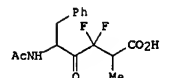
AB Title compds. I (R = H, 4-Me, 4-Me3C, 4-F, 4-Br, 4-MeO, 2,5-di-Me, 3,4-dimethyl; n = 0, 2) were prepared from α -aminoacetophenone, and oxalyl chloride or bisphenyldicarboxylic acid chloride. The relationships between the structures of I and their electronic spectra, fluorescence and laser conversion efficiency were discussed.
 IT 147906-46-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and cyclization of)
 RN 147906-46-5 HCAPLUS
 CN [1,1'-Biphenyl]-4,4'-dicarboxamide, N,N'-bis(2-oxo-2-phenylethyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 149 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)



L4 ANSWER 149 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1992:427103 HCAPLUS
 DOCUMENT NUMBER: 117:27103
 TITLE: Synthesis and N- and C-terminal extension of peptidyl α,α -difluoroalkyl ketones
 AUTHOR(S): Hong, Wonyou; Dong, Liwen; Cai, Zhenhong; Titmas, Richard
 CORPORATE SOURCE: IGEN, Inc., Rockville, MD, 20852, USA
 SOURCE: Tetrahedron Letters (1992), 33(6), 741-4
 CODEN: TELEAY; ISSN: 0040-4039
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 117:27103
 GI

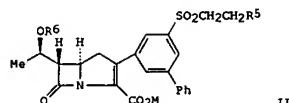
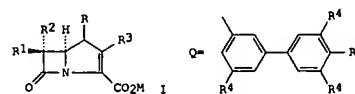


AB The synthesis of peptidyl α,α -difluoroalkyl ketones I and II is described. The key intermediate III can be extended at not only the C-terminal but also the N-terminal.
 IT 127949-49-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and borohydride reduction of)
 RN 127949-49-9 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-[3,3-difluoro-4-methyl-2-oxo-1-phenylmethyl]-5-hexenyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 150 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1992:255395 HCAPLUS
 DOCUMENT NUMBER: 116:255395
 TITLE: Preparation of [(heteroaryliumalkyl)biphenyl]carbanes and analogs as antibiotics
 INVENTOR(S): Dininno, Frank P.; Salzmann, Thomas N.
 PATENT ASSIGNEE(S): Merck and Co., Inc., USA
 SOURCE: Eur. Pat. Appl., 165 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|------------|
| EP 467434 | A1 | 19920122 | EP 1991-201565 | 19910620 |
| US 5011832 | A | 19910430 | US 1990-544281 | 19900626 |
| US 5208329 | A | 19930504 | US 1992-839005 | 19920214 |
| PRIORITY APPLN. INFO.: | | | US 1990-544281 | A 19900626 |
| | | | US 1990-594886 | A 19901009 |

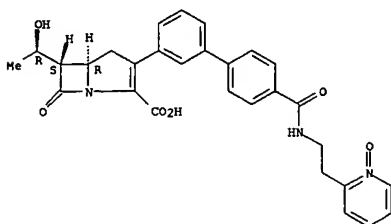
OTHER SOURCE(S): MARPAT 116:255395
 GI



AB Title compds. [I: M = H, neg. charge, pharmaceutically acceptable cation or ester residue; R = H, Me; R1, R2 = H, Me, CHMeOH, etc.; R3 = biphenyl group; Q: R4 are independently selected from: H, Zr5; R5 = (substituted) pyridinio, imidazolio, pyridiniumyl, etc.; Z = (CH2)mZ1(CH2)n; Z1 = bond, O, SOO-2, NH, CO, CONH, etc.; m = 0-6; n = 1-6] were prepared as antibiotics (no data). Thus, biphenylcarbanen II (M = allyl, R6 = CH2:CHCH2O2C, R5 = H) was condensed with N-methylimidazole and (CF3O2)2O and the imidazolium adduct deprotected to give II (M = neg. charge, R5 = N-methylimidazolio, R6 = H).
 IT 140674-00-6P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (preparation of, as antibiotic)
 RN 140674-00-6 HCAPLUS
 CN 1-Azabicyclo[3.2.0]hept-2-ene-2-carboxylic acid, 6-(1-hydroxyethyl)-3-[4'-[[[2-(1-oxido-2-pyridinyl)ethyl]amino]carbonyl][1,1'-biphenyl]-3-yl]-7-oxo-

L4 ANSWER 150 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 , monopotassium salt, [5R-[5a,6a(R*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



• K

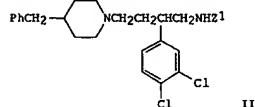
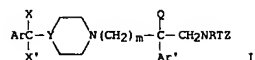
L4 ANSWER 151 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1991:679818 HCAPLUS
 DOCUMENT NUMBER: 115:279818
 TITLE: Preparation of piperidine derivatives as neurokinin and substance P antagonists
 INVENTOR(S): Emonds-Alt, Xavier; Goulaouic, Pierre; Proietto, Vincenzo; Van Broeck, Didier
 PATENT ASSIGNEE(S): SANOFI, Fr.
 SOURCE: Eur. Pat. Appl., 84 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| EP 428434 | A2 | 19910522 | EP 1990-403125 | 19901106 |
| EP 428434 | A3 | 19911009 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| FR 2654100 | A1 | 19910510 | FR 1989-14517 | 19891106 |
| FR 2654100 | B1 | 19920221 | | |
| FR 2663329 | A1 | 19911220 | FR 1990-7534 | 19900615 |
| FR 2663329 | B1 | 19921016 | | |
| FI 97540 | B | 19960930 | FI 1990-5444 | 19901102 |
| FI 97540 | C | 19970110 | | |
| CA 2029275 | AA | 19910507 | CA 1990-2029275 | 19901105 |
| NO 9004802 | A | 19910507 | NO 1990-4802 | 19901105 |
| NO 177299 | B | 19950515 | | |
| NO 177299 | C | 19950823 | | |
| AU 9065838 | A1 | 19910523 | AU 1990-65838 | 19901105 |
| AU 649973 | B2 | 19940609 | | |
| HU 56543 | A2 | 19910930 | HU 1990-7027 | 19901105 |
| US 5317020 | A | 19940531 | US 1990-610093 | 19901105 |
| IL 111292 | A1 | 19960331 | IL 1990-111292 | 19901105 |
| RU 2084453 | C1 | 19970720 | RU 1990-4831627 | 19901105 |
| RU 2114828 | C1 | 19980710 | RU 1993-45020 | 19901105 |
| ZA 9008881 | A | 19910828 | ZA 1990-8881 | 19901106 |
| JP 03206086 | A2 | 19910909 | JP 1990-300929 | 19901106 |
| PL 165758 | B1 | 19950228 | PL 1990-293823 | 19901106 |
| PL 165854 | B1 | 19950228 | PL 1990-293824 | 19901106 |
| PL 166565 | B1 | 19950630 | PL 1990-287644 | 19901106 |
| PL 166582 | B1 | 19950630 | PL 1990-303827 | 19901106 |
| IL 96241 | A1 | 19960331 | IL 1990-96241 | 19901115 |
| LV 10713 | B | 19951020 | LV 1993-142 | 19930225 |
| US 5686609 | A | 19971111 | US 1994-208672 | 19940311 |
| AU 9459245 | A1 | 19940602 | AU 1994-59245 | 19940331 |
| AU 668018 | B2 | 19960418 | | |
| NO 9500239 | A | 19910507 | NO 1995-239 | 19950123 |
| NO 180193 | B | 19961125 | | |
| NO 180193 | C | 19970305 | | |
| NO 9500240 | A | 19910507 | NO 1995-240 | 19950123 |
| NO 179580 | B | 19960729 | | |
| NO 179580 | C | 19961106 | | |
| US 5618938 | A | 19970408 | US 1995-479634 | 19950607 |
| FI 9502956 | A | 19950615 | FI 1995-2956 | 19950615 |
| FI 9502957 | A | 19950615 | FI 1995-2957 | 19950615 |

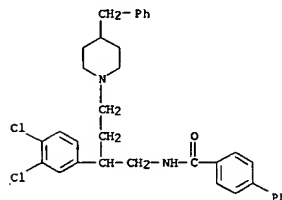
L4 ANSWER 151 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 FI 9800227 A 19980202 FI 1998-227 19980202
 PRIORITY APPL. INFO.: FR 1989-14517 A 19891106
 FR 1990-7534 A 19900615
 FI 1990-5444 A 19901102
 NO 1990-4802 A 19901105
 US 1990-610093 A3 19901105
 IL 1990-96241 A3 19901115
 US 1994-208672 A3 19940311
 FI 1995-2956 A 19950615

OTHER SOURCE(S): MARPAT 115:279818
 GI



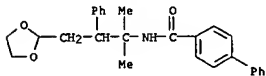
AB The title compds. I [m = 1-3; Ar, Ar' = thienyl, (substituted) Ph, etc.; X = H; X' = H, OH, or XX' = oxo, dialkylaminoalkoxyimino, etc.; Y = N, CX''; X'' = H or X'X'' = carbon-carbon bond; Q = H, alkyl, (CH2)qAm; q = 2 or 3; Am = piperidino, 4-benzylpiperidino, etc.; R = H, Me, (CH2)nLi; n = 2-5; L = H, amino; T = CO, C(W)NH; V = O, S; Z = H, M, or OH when T = CO; or Z = M when T = C(W)NH; M = H, alkyl, (substituted) phenylalkyl, etc.] were prepared. I are neurokinin and substance P antagonists (no data). Reaction of amine II (Z1 = H) with 2,4-dichlorobenzoyl chloride in the presence of Et3N gave II (Z1 = 2,4-dichlorobenzoyl) isolated as its HCl salt. I are also useful as allergy and inflammation inhibitors (no data).
 IT 135935-09-OP
 RI: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of, as neurokinin antagonist)
 RN 135935-09-0 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-[2-(3,4-dichlorophenyl)-4-[4-(phenylmethyl)-1-piperidinyl]butyl]-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 151 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

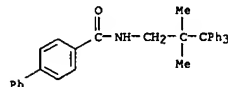


• HCl

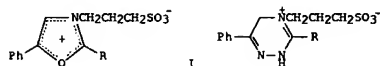
L4 ANSWER 152 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1991:408631 HCAPLUS
 DOCUMENT NUMBER: 115:8631
 TITLE: Controlled reduction of nitroalkanes to alkyl hydroxylamines or amines by samarium diiodide
 AUTHOR(S): Kende, Andrew S.; Mendoza, Jose S.
 CORPORATE SOURCE: Dep. Chem., Univ. Rochester, Rochester, NY, 14627, USA
 SOURCE: Tetrahedron Letters (1991), 32(14), 1699-702
 CODEN: TELEAY; ISSN: 0040-4039
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 115:8631
 AB Alkyl N-hydroxylamines and alkylamines were prepared by the reduction of nitroalkanes with SmI₂ in the presence of MeOH as proton source. Thus, treatment of 2-(3-methyl-3-nitro-2-phenylbutyl)dioxolane (I) with 4 equiv SmI₂ gave 88% 2-[3-(N-hydroxyamino)-3-methyl-2-phenylbutyl]dioxolane; treatment of I with 6 equiv SmI₂ gave 2-[3-amino-3-methyl-2-phenylbutyl]dioxolane which was treated with 4-PhC₆H₄COCl to give the corresponding amide. SmI₂ was prepared by treating Sm with ICH₂CH₂I in THF.
 IT 134304-56-6P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 134304-56-6 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-[3-(1,3-dioxolan-2-yl)-1,1-dimethyl-2-phenylpropyl]- (9CI) (CA INDEX NAME)



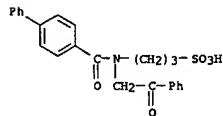
L4 ANSWER 153 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1991:100835 HCAPLUS
 DOCUMENT NUMBER: 114:100835
 TITLE: Radical combination in the ortho position of trityl radical observed in single-electron transfer reactions of trityl anion
 AUTHOR(S): Werry, Jürgen; Lin, Pen Yuan; Bellos, Konstantinos; Assiathanakis, Petros; Stamm, Helmut
 CORPORATE SOURCE: Pharm.-Chem. Inst., Univ. Heidelberg, Heidelberg, D-6900, Germany
 SOURCE: Journal of the Chemical Society, Chemical Communications (1990), (20), 1389-90
 CODEN: JCCCAT; ISSN: 0022-4936
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 114:100835
 AB Single-electron transfer reactions between trityl anion and 1-acyl-2,2-dimethylaziridines provide, among other products, the methallyl amides and the triphenylmethane carrying an amidoethyl chain attached with the tertiary carbon ortho to the triphenylmethane.
 IT 132381-76-1P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 132381-76-1 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-(2,2-dimethyl-3,3,3-triphenylpropyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 154 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1990:478346 HCAPLUS
 DOCUMENT NUMBER: 113:78346
 TITLE: Recyclization of 3-oxazoliopropanesulfonates into 2,5-dihydro-1,2,4-triazinio-4-propanesulfonates
 AUTHOR(S): Lipnitskii, V. F.; Shvaika, O. P.
 CORPORATE SOURCE: Inst. Fiz.-Org. Khim. Uglekhim., Donetsk, 340114, USSR
 SOURCE: Khimiya Geterotsiklicheskh Soedinenii (1989), (10), 1425-6
 CODEN: KGSSAQ; ISSN: 0453-8234
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 OTHER SOURCE(S): CASREACT 113:78346
 GI



AB Recyclization of oxazolium betaines I (R = 4-PhC₆H₄, Ph) by N₂H₄.H₂O in refluxing MeOH gave 81 and 80% triazinio betaines II, resp. Treating I (R = 4-PhC₆H₄) with KOH gave 93% PhCOCH₂N(COC₆H₄Ph-4)(CH₂)₃SO₃K.
 IT 128557-68-6P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 128557-68-6 HCAPLUS
 CN 1-Propanesulfonic acid, 3-[[[1,1'-biphenyl]-4-ylcarbonyl](2-oxo-2-phenylethyl)amino]-, potassium salt (9CI) (CA INDEX NAME)



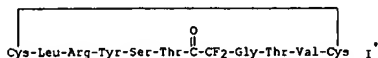
• X

L4 ANSWER 155 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1990:437088 HCAPLUS
 DOCUMENT NUMBER: 113:37088
 TITLE: Peptide analogs as haptens to elicit catalytic antibodies
 INVENTOR(S): Titmas, Richard C.; Hansen, David E.; Hong, Wonpyo; Booth, Paul M.; Powell, Michael J.; Rees, Anthony R.; Massey, Richard J.
 PATENT ASSIGNEE(S): IGEN Inc., USA
 SOURCE: PCT Int. Appl., 215 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 19
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|-------------|
| WO 8910961 | A1 | 19891116 | WO 1989-US1951 | 19890504 |
| W: AU, DK, FI, JP, KR, NO, US | | | | |
| RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE | | | | |
| ZA 8903284 | A | 19900328 | ZA 1989-3284 | 19890503 |
| AU 8937393 | A1 | 19891129 | AU 1989-37393 | 19890504 |
| AU 643186 | B2 | 19931111 | | |
| EP 413762 | A1 | 19910227 | EP 1989-906570 | 19890504 |
| EP 413762 | B1 | 20000712 | | |
| R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE | | | | |
| JP 05501948 | T2 | 19930415 | JP 1989-506288 | 19890504 |
| JP 2772088 | B2 | 19980702 | | |
| AT 135235 | E | 19960315 | AT 1989-906520 | 19890504 |
| EP 701818 | A2 | 19960320 | EP 1995-111577 | 19990504 |
| EP 701818 | A3 | 19970604 | | |
| EP 701818 | B1 | 20030730 | | |
| R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE | | | | |
| IL 90200 | A1 | 19970415 | IL 1989-90200 | 19890504 |
| CA 1340485 | A1 | 19990406 | CA 1989-598754 | 19890504 |
| JP 11152232 | A2 | 19990608 | JP 1998-211311 | 19890504 |
| AT 194649 | E | 20000715 | AT 1989-906570 | 19890504 |
| AT 246004 | E | 20030815 | AT 1995-111577 | 19890504 |
| CA 1341478 | A1 | 20050405 | CA 1989-598697 | 19890504 |
| US 6258360 | B1 | 20010710 | US 1994-325554 | 19941018 |
| US 6702705 | B1 | 20040309 | US 1995-392407 | 19950222 |
| US 6521432 | B1 | 20030218 | US 1995-479849 | 19950607 |
| US 6946272 | B1 | 20050920 | US 1999-303716 | 19990430 |
| US 2002045231 | A1 | 20020418 | US 2001-817502 | 20010326 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | US 1988-190271 | A2 19880504 |
| | | | US 1983-556016 | B1 19831129 |
| | | | US 1984-674253 | A2 19841127 |
| | | | IL 1984-73685 | A0 19841129 |
| | | | EP 1989-906520 | A3 19890504 |
| | | | JP 1989-505991 | A3 19890504 |
| | | | WO 1989-US1950 | A2 19890504 |
| | | | WO 1989-US1951 | A 19890504 |
| | | | US 1989-364077 | A1 19890608 |
| | | | US 1990-498225 | A2 19900323 |
| | | | US 1991-700210 | B2 19910612 |
| | | | US 1991-740501 | B2 19910805 |
| | | | US 1991-761868 | A2 19910903 |
| | | | US 1991-773042 | B1 19911010 |
| | | | US 1992-837660 | A1 19920214 |
| | | | US 1993-52490 | A2 19930423 |

L4 ANSWER 155 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 US 1993-132121 B1 19931005
 US 1994-333237 A1 19941102
 US 1999-241876 A1 19990202

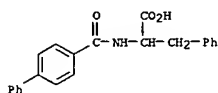
OTHER SOURCE(S): MARPAT 113:37088
 GI



AB Synthetic haptens are prepared and used to stimulate production of catalytic antibodies. The haptens are designed such that the corresponding antibodies will selectively stabilize Δ 1 of the high energy intermediates or transition states in the cleavage or formation of an amide, ester, or glycosidic bond. There are 3 classes of haptens: (1) those in which the hybridization of the atom corresponding to the carbonyl atom of the scissile bond of the amide or ester is converted from sp^2 to sp^3 hybridization; (2) those in which any of the atoms is replaced by a different atom, e.g. C may be replaced with P, S, Si, or Br and (3) those in which the atoms are part of a mono- or bicyclic system. Antibody-producing cells elicited by these haptens are used to prepare monoclonal antibodies and these are screened for catalytic activity. Cyclic peptide I, containing a difluoroketone transition state analog, was synthesized. The natural analog of this peptide includes residues 85 and 86 of the "flap" region of human renin. Cleavage of this bond disrupts binding of substrate to the catalytic site. The hapten was conjugated to keyhole limpet hemocyanin using glutaraldehyde and used to prepare monoclonal antibodies using standard procedures. These antibodies were found to inhibit renin activity in human plasma.

IT 127949-47-7P
 RI: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction of, in preparation of peptide analogs as haptens for catalytic monoclonal antibody production)

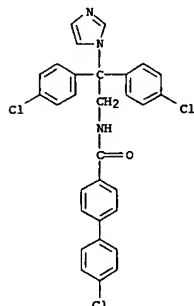
RN 127949-47-7 HCAPLUS
 CN Phenylalanine, N-([1,1'-biphenyl]-4-ylcarbonyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 156 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 2,2-bis(4-chlorophenyl)-(1H-imidazol-1-yl)-1-(4-chlorobenzoylamino)ethane (II). II inhibited human placental aromatase with an IC50 of 4.2 nM.

IT 116901-71-4P
 RI: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of, as aromatase inhibitor)

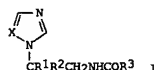
RN 116901-71-4 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-[2,2-bis(4-chlorophenyl)-2-(1H-imidazol-1-yl)ethyl]-4'-chloro- (9CI) (CA INDEX NAME)



L4 ANSWER 156 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1988:570429 HCAPLUS
 DOCUMENT NUMBER: 109:170429
 TITLE: Preparation and testing of azolyethylcarboxamides as aromatase inhibitors
 INVENTOR(S): Egger, Helmut; Waelchli, Rudolf
 PATENT ASSIGNEE(S): Sandoz-Patent-G.m.b.H., Fed. Rep. Ger.
 SOURCE: Ger. Offen. 7 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|----------|
| DE 3740125 | A1 | 19880616 | DE 1987-3740125 | 19871126 |
| CH 677925 | A | 19910715 | CH 1987-4607 | 19871126 |
| GB 2199579 | A1 | 19880713 | GB 1987-27978 | 19871130 |
| GB 2199579 | B2 | 19900718 | | |
| DK 8706312 | A | 19880604 | DK 1987-6312 | 19871201 |
| FI 8705300 | A | 19880604 | FI 1987-5300 | 19871201 |
| SE 8704792 | A | 19880604 | SE 1987-4792 | 19871201 |
| AU 605522 | A1 | 19880616 | AU 1987-81962 | 19871201 |
| AU 605522 | B2 | 19910117 | | |
| IL 84665 | A1 | 19911121 | IL 1987-84665 | 19871201 |
| FR 2607810 | A1 | 19880610 | FR 1987-16736 | 19871202 |
| FR 2607810 | B1 | 19891201 | | |
| JP 63145270 | A2 | 19880617 | JP 1987-305522 | 19871202 |
| JP 06078318 | B4 | 19941005 | | |
| NL 8702897 | A | 19880701 | NL 1987-2897 | 19871202 |
| HU 45506 | A2 | 19880728 | HU 1987-5414 | 19871202 |
| HU 198694 | B | 19891128 | | |
| BE 1001235 | A4 | 19890829 | BE 1987-1375 | 19871202 |
| PL 151588 | B1 | 19900928 | PL 1987-269180 | 19871202 |
| AT 8703168 | A | 19920615 | AT 1987-3168 | 19871202 |
| AT 395587 | B | 19930125 | | |
| ZA 8709093 | A | 19890726 | ZA 1987-9093 | 19871203 |
| ES 2010235 | A6 | 19891101 | ES 1987-3470 | 19871203 |

PRIORITY APPL. INFO.:
 OTHER SOURCE(S): CASREACT 109:170429; MARPAT 109:170429
 GI



AB The title compds. [I; R1, R2 = (substituted) aryl, heteroaryl; R3 = (substituted) (benzo-fused) cycloalkyl, aryl, heteroaryl, alkyl, alkoxy; X = CH, N] were prepared as aromatase inhibitors. 2,2-Bis(4-chlorophenyl)-2-(1H-imidazol-1-yl)-1-aminoethane (preparation given) in pyridine was treated with 2-chlorobenzoyl chloride and the mixture was stirred 4 h to give

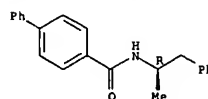
L4 ANSWER 157 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1984:509917 HCAPLUS
 DOCUMENT NUMBER: 101:109917
 TITLE: A unique reversal of elution order during direct enantiomeric resolution of amide derivatives of 1-phenyl-2-aminopropane by high performance liquid chromatography on chiral stationary phases
 AUTHOR(S): Doyle, T. D.; Wainer, I. W.
 CORPORATE SOURCE: Div. Drug Chem., Food and Drug Adm., Washington, DC, 20204, USA
 SOURCE: HRC & CC, Journal of High Resolution Chromatography and Chromatography Communications (1984), 7(1), 38-40
 CODEN: HRCJCB; ISSN: 0344-7138
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Enantiomeric amide derivs. of (S)- and (R)-1-phenyl-2-aminopropanes were resolved by high performance liquid chromatog. on com. available ionically and covalently bonded chiral stationary phases [(R)-N-(3,5-dinitrobenzoyl)phenylglycine]. In 10 enantiomeric amide pairs, the (R)-isomer of all 10 amides was eluted first on the covalent column; the (R)-isomer of 9 derivs. was eluted first on the ionic column. However, the 3,5-dinitrobenzoyl amide of (S)-amphetamine eluted before the (R)-isomer on the ionic column. This reversal emphasizes the hazards of relying on observed elution order as an a priori indication of absolute configuration.

IT 91461-68-6
 RI: ANT (Analyte); ANST (Analytical study)
 (high performance liquid chromatog. of, on chiral stationary phases, enantiomeric resolution by)

RN 91461-68-6 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-(1-methyl-2-phenylethyl)-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

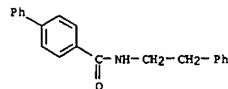


L4 ANSWER 158 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1984:491715 HCAPLUS
 DOCUMENT NUMBER: 101:91715
 TITLE: Bis(aminoneopentyl) aromatics and polyamides derived from them
 INVENTOR(S): Frazer, August H.; Harris, John F., Jr.
 PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
 SOURCE: U.S., 21 pp. Division of U.S. Ser. No. 266,058.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|-------------|
| US 4451642 | A | 19840529 | US 1982-420511 | 19820920 |
| US 4564705 | A | 19860114 | US 1981-266058 | 19810521 |
| PRIORITY APPLN. INFO.: | | | US 1977-804853 | A2 19770608 |
| | | | US 1981-266058 | A3 19810521 |

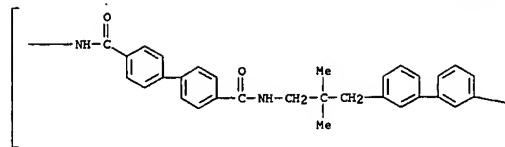
OTHER SOURCE(S): CASREACT 101:91715
 AB Aromatic-aliphatic diamines having formula (H₂NCH₂CHMe₂CH₂)₂Z (Z = arylene or substituted arylene) are prepared and used for the preparation of thermally stable rigid polyamides. Thus, 8.50 g 4,4'-bis(bromomethyl)biphenyl [20248-96-5] was added to a mixture of THF 250, (iso-Pr)₂NH [108-18-9] 7.00, and 2.4 M BuLi 21.0 mL and 3.42 g Me₂CHCN in 20 mL THF. The mixture was stirred at -76° to give 6.8 g 4,4'-bis(2-methyl-2-cyanopropyl)biphenyl (I) [69774-40-9]. A mixture of 6.54 g I in 400 mL PhMe and 71 mL 25% (iso-Bu)₂AlH in PhMe was refluxed for 17 h and 40 min. A solution of 5 mL water in 22 mL MeOH was added dropwise followed by another dropwise addition of a solution of 20 mL water in 40 mL MeOH to give 4,4'-bis(2,2-dimethyl-3-aminopropyl)biphenyl (II) [69761-38-2]. A mixture of 9.6500 g II and 9.4659 g di-Ph terephthalate (III) was heated from 210° to 300° for 6 h and 44 min to give a copolymer [91629-01-5]. The weight loss of this copolymer after heating at 375° for 1 h was 17.5%, compared with 26.5% for 4,4'-bis(1,1-dimethyl-3-aminopropyl)biphenyl-III copolymer.
 IT 69761-68-8P
 RL: PREP (Preparation)
 (manufacture of heat-stable)
 RN 69761-68-8 HCAPLUS
 CN Poly[iminocarbonyl[1,1'-biphenyl]-4,4'-diylcarbonylimino(2,2-dimethyl-1,3-propanediyl)][1,1'-biphenyl]-3,3'-diyl(2,2-dimethyl-1,3-propanediyl)] (9CI) (CA INDEX NAME)

L4 ANSWER 159 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1984:34059 HCAPLUS
 DOCUMENT NUMBER: 100:34059
 TITLE: Reversed-phase liquid-chromatographic elution characteristics of substituted N-ethylbenzamides
 AUTHOR(S): Lehtonen, Pekka
 CORPORATE SOURCE: Res. Lab. State Alcohol Monopoly, Helsinki, SF-00101/10, Finland
 SOURCE: Journal of Chromatography (1983), 267(2), 277-84
 CODEN: JOCRAM; ISSN: 0021-9673
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The reversed-phase liquid-chromatog. retention of 16 N-ethylbenzamides substituted with Me, methoxy or Ph groups at the 4-Ph position and/or at the 2-Et position was studied using 2 different octadecyl-phase columns and a Ph-phase column with H₂O-MeOH solvent mixts. For isomeric amides, increased retention was observed for the isomer with the larger substituent at the 4-Ph position. Satisfactory linear correlations were obtained by plotting log k' (log capacity factor) obtained on 1 column vs. that on a 2nd column at the same or different eluent compns. Thus, quant. structure-retention relationships can be transformed from 1 reversed-phase system to another. The mol. connectivity indexes, χ , to 3rd order were calculated for the amides, and a high degree of correlation was observed between them and the measured log k'.
 IT 38925-75-6
 RL: PROC (Process)
 (reversed-phase liquid chromatog. of)
 RN 38925-75-6 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-(2-phenylethyl)- (9CI) (CA INDEX NAME)

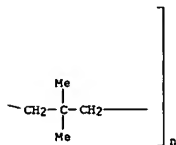


L4 ANSWER 158 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

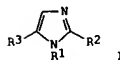
PAGE 1-A



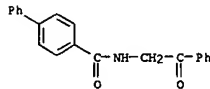
PAGE 1-B



L4 ANSWER 160 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1982:423694 HCAPLUS
 DOCUMENT NUMBER: 97:23694
 TITLE: Some derivatives of 1,2,5-triphenylimidazole
 AUTHOR(S): Tishchenko, V. G.; Popilin, O. N.
 CORPORATE SOURCE: USSR
 SOURCE: Deposited Doc. (1980), SPSTL 358Khp-D80, 8 pp.
 Avail.: SPSTL
 Report
 Russian
 OTHER SOURCE(S): CASREACT 97:23694
 GI



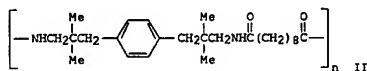
AB Twenty-seven imidazoles I (R1, R2, R3 = alkyl or substituted aryl) were prepared in 25-90% yields by cyclocondensation of R1NH₂ with R2CONHCH₂COR₃ in the presence of PCl₃.
 IT 37061-74-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (cyclocondensation of, with anilines)
 RN 37061-74-8 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-(2-oxo-2-phenylethyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 161 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1979:169303 HCAPLUS
 DOCUMENT NUMBER: 90:169303
 TITLE: Bis(2-methyl-2-cyanopropyl) aromatics
 INVENTOR(S): Frazer, August H.; Harris, John F., Jr.; Martin, Elmore L.
 PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
 SOURCE: U.S., 12 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

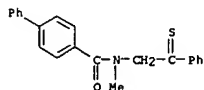
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------|------|----------|-----------------|------------|
| US 4130579 | A | 19781219 | US 1977-804855 | 19770608 |
| PRIORITY APPL. INFO.: | | | US 1977-804855 | A 19770608 |

GI



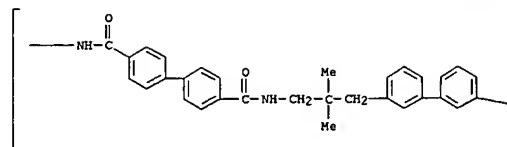
AB Aromatic-aliphatic dinitriles $\text{NCCMe}_2\text{CH}_2\text{ArCH}_2\text{CMe}_2\text{CN}$ (where Ar is arylene or substituted arylene) were prepared and hydrolyzed to the corresponding diamines which were copolycond. with dicarboxylic acid derivs. to form thermally-stable, rigid, polyamide films and fibers. Thus, treatment of α, α' -dibromo-p-xylene [623-24-5] with $\text{Li}^+(\text{Me}_2\text{CCN})^-$ (formed in situ from diisopropylamine [108-18-9], BuLi, and isobutyronitrile [78-82-0]) gave $\text{NCCMe}_2\text{CH}_2\text{C}_6\text{H}_4\text{-p-CH}_2\text{CMe}_2\text{CN}$ [69774-41-0] which was converted to the resp. diamine (I) [69761-28-0] by treatment with (iso-Bu) $_2\text{AlH}$ followed by hydrolysis. Polycondensation of I with sebacoyl chloride gave a polyamide (II) [69761-71-3] of inherent viscosity 1.32 (0.05% in m-cresol at 25°) and which was formed into a clear, tough, colorless film at 180°/500 psi; alternatively, II was spun into a fiber which, after cold drawing, had strength of .apprx.1.5 g/denier.
 IT 69761-68-8
 RL: USES (Uses)
 (films and fibers)
 RN 69761-68-8 HCAPLUS
 CN Poly[iminocarbonyl[1,1'-biphenyl]-4,4'-diylcarbonylimino(2,2-dimethyl-1,3-propanediyl)[1,1'-biphenyl]-3,3'-diyl(2,2-dimethyl-1,3-propanediyl)] (9CI)
 (CA INDEX NAME)

L4 ANSWER 162 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1976:523879 HCAPLUS
 DOCUMENT NUMBER: 85:123879
 TITLE: Recyclization reactions of heterocycles. XVIII.
 Synthesis and recyclizations of thiazolium and benzothiazolium salts
 AUTHOR(S): Shvaika, O. P.; Fomenko, V. I.
 CORPORATE SOURCE: Inst. Fiz.-Org. Khim. Uglekhim. im. Pisarzhevskogo, Donetsk, USSR
 SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1976), (5), 635-40
 CODEN: KGSSAQ; ISSN: 0132-6244
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 OTHER SOURCE(S): CASREACT 85:123879
 GI For diagram(s), see printed CA issue.
 AB RICSCH2NR3COR2 (R1 = Ph, p-BrC6H4, R2 = p-PhC6H4, Ph, 4-[BzCH2NMeC(S)]C6H4, R3 = Me, p-MeC6H4, Ph), prepared in 51-100% yields from I by the action of NaHS, were cyclized by HClO4 to give 40-100% thiazolium perchlorates (II, R1 = Ph, p-BrC6H4, R2 = Ph, p-PhC6H4, R4, R3 = Me, p-MeC6H4, Ph). Dihydrotriazines IV (R1 = Ph, R2 = Ph, p-PhC6H4), and III: R3 = Ph, Me) were obtained in 40-90% yields by treatment of the corresponding thiazolium salt with N2H4. Similarly 60 and 75% I (R = Me, Et) were obtained from RNHNH2 and 40% PhNHN:CPHNMCH2CPh:NNHPh was obtained from PhNHNH2.
 IT 60413-30-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and cyclization of)
 RN 60413-30-1 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-methyl-N-(2-phenyl-2-thioxoethyl)- (9CI)
 (CA INDEX NAME)

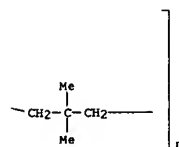


L4 ANSWER 161 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

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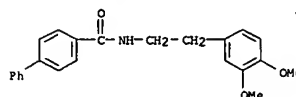
PAGE 1-B



L4 ANSWER 163 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1975:458672 HCAPLUS
 DOCUMENT NUMBER: 83:58672
 TITLE: 4-Biphenylisoquinoline derivatives
 INVENTOR(S): Jansen, Alexander Bertus A.; Hollywood, John; Wilson, Alan Brian
 PATENT ASSIGNEE(S): UK
 SOURCE: U.S., 6 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------|------|----------|-----------------|------------|
| US 3823148 | A | 19740709 | US 1972-256955 | 19720525 |
| GB 1386076 | A | 19750305 | GB 1971-18765 | 19720602 |
| PRIORITY APPL. INFO.: | | | GB 1971-18765 | A 19710603 |

GI For diagram(s), see printed CA issue.
 AB The dihydroisoquinoline I (R = p-PhC6H4, 1-adamantyl, p-MeO2NHC6H4CH2, p-H2NC6H4CH2, etc.; R1 = H, Me) were prepared by cyclization of amides. Thus, p-PhC6H4COCl was treated with 3,4-(MeO)2C6H3CH2CH2NH2 to give 3,4-(MeO)2C6H3CH2CH2NHCOOC6H4Cl-p, which was cyclized with POCl3 to give I (R = p-PhC6H4, R1 = Me). Several I were reduced to the 1,2,3,4-tetrahydro derivs. I were hypotensives, depressants, and anticonvulsants (no data).
 IT 56205-46-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and cyclization of)
 RN 56205-46-0 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-[2-(3,4-dimethoxyphenyl)ethyl]- (9CI)
 (CA INDEX NAME)



L4 ANSWER 164 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1974:108395 HCAPLUS
 DOCUMENT NUMBER: 80:108395
 TITLE: Bisisoquinolines
 INVENTOR(S): Wada, Masao; Sato, Yasuhiko; Sasaki, Yasuhiko
 PATENT ASSIGNEE(S): Tanabe Seiyaku Co., Ltd.
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------|------|----------|-----------------|------------|
| JP 49000277 | A2 | 19740105 | JP 1972-39002 | 19720418 |
| PRIORITY APPL. INFO.: | | | JP 1972-39002 | A 19720418 |

GI For diagram(s), see printed CA Issue.

AB The amides I were subjected to an intramolecular ring closure and the resulting bisisoquinolines II were, if necessary, reduced to give the bisisoquinolines III (R1, R2 = alkoxyl or R1R2 = OCH2O; A = IV, V, VI, or VII). II and III are remedies for thrombosis. E.g., 1 g I (R1 = R2 = OMe, A = IV) prepared from 3,4-dimethoxyphenethylamine and terephthaloyl dichloride was heated at 120° with POC13 and pyridine to give 90% corresponding II.2HCl, which (10.6 g) was reduced with H using PtO2 as a catalyst to give 3.6 g meso-III.2HCl and 4.2 g racemic III.2HCl. Similarly prepared were the following II and III or salts thereof (R1, R2, and A given): OEt, OEt, IV; R1R2 = -OCH2O-, IV; OMe, OMe, VI; OMe, OMe, V; OMe, OMe, VII.

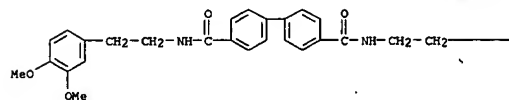
IT 52562-13-7

RL: RCT (Reactant); RACT (Reactant or reagent)
 (cyclization of)

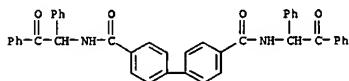
RN 52562-13-7 HCAPLUS

CN [1,1'-Biphenyl]-4,4'-dicarboxamide, N,N'-bis[2-(3,4-dimethoxyphenyl)ethyl]-
 (9CI) (CA INDEX NAME)

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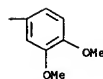


L4 ANSWER 165 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1973:515491 HCAPLUS
 DOCUMENT NUMBER: 79:115491
 TITLE: Synthesis of 4,4',5,5'-tetra-substituted di-2-imidazolyl derivatives, starting materials for the synthesis of 1,4,5,8-tetraazafulvalenes
 AUTHOR(S): Schneiders, Peter; Heinze, Juergen; Baumgaertel, Helmut
 CORPORATE SOURCE: Inst. Phys. Chem., Univ. Freiburg, Freiburg/Br., Fed. Rep. Ger.
 SOURCE: Chemische Berichte (1973), 106(7), 2415-17
 CODEN: CHBEAM; ISSN: 0009-2940
 DOCUMENT TYPE: Journal
 LANGUAGE: German
 GI For diagram(s), see printed CA Issue.
 AB Pyridine was slowly added to a mixture of PhCOCHPhNH2.HCl (I) and the acid chloride II (n = 0-3) in C6H6 to give approx. 80% amide III. This on boiling in AcOH containing a large excess of NH4OAc (or if n = 3 at 220° in NH4OH) gave approx. 90% title imidazole (IV). Similarly, I and 1,3,5-(ClCO)3C6H3 gave 1,3,5-tris(diphenylimidazol-2-yl)-benzene.
 IT 27051-92-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 27051-92-9 HCAPLUS
 CN [1,1'-Biphenyl]-4,4'-dicarboxamide, N,N'-bis(2-oxo-1,2-diphenylethyl)-
 (9CI) (CA INDEX NAME)

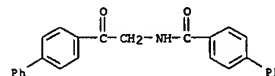


L4 ANSWER 164 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)

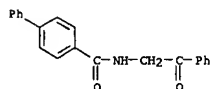
PAGE 1-B



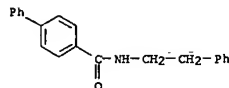
L4 ANSWER 166 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1973:97535 HCAPLUS
 DOCUMENT NUMBER: 78:97535
 TITLE: Anhydrous hydrofluoric acid as a cyclizing agent in the preparation of several substituted oxazoles from N-aryl-α-amino ketones
 AUTHOR(S): Daub, Guido H.; Ackerman, Margaret E.; Hayes, F. Newton
 CORPORATE SOURCE: Dep. Chem., Univ. New Mexico, Albuquerque, NM, USA
 SOURCE: Journal of Organic Chemistry (1973), 38(4), 828-9
 CODEN: JOCEAH; ISSN: 0022-3263
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Anhydrous HF is an effective cyclizing agent for the preparation of 2,5-diaryloxazoles from N-aryl-α-amino ketones. Attempts to prepare 2,5-diphenyloxadiazole from 1,2-dibenzoylhydrazine failed using this cyclizing agent.
 IT 37061-76-0
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (cyclization of, in presence of hydrogen fluoride, oxazoles from)
 RN 37061-76-0 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-(2-[1,1'-biphenyl]-4-yl-2-oxoethyl)-
 (9CI) (CA INDEX NAME)



L4 ANSWER 167 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1972:514285 HCAPLUS
 DOCUMENT NUMBER: 77:114285
 TITLE: Synthesis of 2,5-disubstituted oxazoles
 AUTHOR(S): Paul, S. D.; Dhane, D. L.; Noras, K. A.; Mushrif, A. U.
 CORPORATE SOURCE: Chem. Eng. Div., Bhabha At. Res. Cent., Trombay, India
 SOURCE: Journal of the Indian Chemical Society (1972), 49(6), 579-82
 CODEN: JICSAH; ISSN: 0019-4522
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI For diagram(s), see printed CA Issue.
 AB The oxazoles (I, R = Ph, 4-biphenyl, R1 = p-MeC6H4, Ph, 1-naphthyl, 4-biphenyl; II, R2 = Ph, p-MeC6H4, 4-biphenyl) were prepared by cyclodehydration of the amides RCONHCH2COR1 and p-(R2COCH2NHCO)2CGH4. Thus, p-phenylhippuric acid was treated with PCl5-AcCl to give p-PhCGH4CONHCH2COCl, which was treated with CGH6 under Friedel-Crafts conditions to give 4% p-PhCGH4CONHCH2COPh; the latter was cyclized by POC13 to give I (R = 4-biphenyl, R1 = Ph).
 IT 37061-74-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and cyclodehydration to oxazole)
 RN 37061-74-8 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-(2-oxo-2-phenylethyl)- (9CI) (CA INDEX NAME)



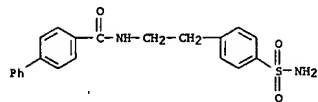
L4 ANSWER 168 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1972:496746 HCAPLUS
 DOCUMENT NUMBER: 77:96746
 TITLE: 1-Phenyl-2-phenethyl-1,2,3,4-tetrahydroisoquinolines. New series of nonsteroidal female antifertility agents
 AUTHOR(S): Paul, Rolf; Coppola, John A.; Cohen, Elliott
 CORPORATE SOURCE: Lederle Lab. Div., American Cyanamid Co., Pearl River, NY, USA
 SOURCE: Journal of Medicinal Chemistry (1972), 15(7), 720-6
 CODEN: JMCHAR; ISSN: 0022-2623
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 77:96746
 AB The most potent antifertility agent in a series of 64 tetrahydroisoquinolines synthesized was (+,+-)-1-[4-[2-(1-pyrrolidinyl)ethoxy]phenyl]-2-(2-phenylpropyl)-1,2,3,4-tetrahydroisoquinoline-2HCl (I-2HCl) [36149-03-8], which was >5 times as potent as estrone in rats. I was also 1 of only 4 compds. in the series with diminished hormonal side effects. To synthesize I, p-methoxyphenylacetyl chloride was coupled with phenethylamine and the product cyclized with polyphosphoric acid to the dihydroisoquinoline, which was reduced with NaBH4 to the tetrahydroisoquinoline. The N-aralkyl group was attached by standard methods. The OMe was then converted to OH and coupled with 1-chloro-2-(1-pyrrolidyl)ethane to yield I.
 IT 38925-75-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 38925-75-6 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-(2-phenylethyl)- (9CI) (CA INDEX NAME)



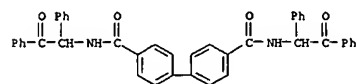
L4 ANSWER 169 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1970:520372 HCAPLUS
 DOCUMENT NUMBER: 73:120372
 TITLE: Phenylsulfonyl ureas as antidiabetic agents
 INVENTOR(S): Weber, Helmut; Aumüller, Walter; Weyer, Rudi; Muth, Karl; Schmidt, Felix Helmut
 PATENT ASSIGNEE(S): Farbwerke Hoechst A.-G.
 SOURCE: U.S., 26 pp. Division of U.S. 3426067
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 5
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|------------|
| US 3507961 | A | 19700421 | US 1968-766008 | 19680809 |
| DE 1443878 | A | 19681212 | DE 1964-F42062 | 19640220 |
| DE 1443878 | B2 | 19730201 | | |
| DE 1443878 | C3 | 19730830 | | |
| DE 1443890 | A | 19690220 | DE 1964-F42933 | 19640521 |
| DE 1443890 | B2 | 19730201 | | |
| DE 1443890 | C3 | 19730830 | | |
| DE 1443894 | A | 19690424 | DE 1964-F43268 | 19640626 |
| DE 1443894 | C3 | 19730315 | | |
| PRIORITY APPLN. INFO.: | | | DE 1963-F41042 | A 19631019 |
| | | | DE 1964-F42062 | A 19640220 |
| | | | DE 1964-F42933 | A 19640521 |
| | | | DE 1964-F43268 | A 19640626 |

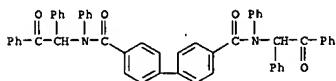
AB The disclosure is the same, but the claims are different.
 IT 25200-24-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 25200-24-2 HCAPLUS
 CN 4-Biphenylcarboxamide, N-(p-sulfamoylphenethyl)- (8CI) (CA INDEX NAME)



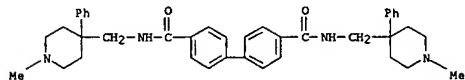
L4 ANSWER 170 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1970:403835 HCAPLUS
 DOCUMENT NUMBER: 73:3835
 TITLE: Preparation of 2,2'-bisoxazolyls and 2,2'-bisthiazolyls, and of arylenebis(2-oxazolyl) and arylenebis(2-thiazolyl) derivatives
 AUTHOR(S): Heinze, Juergen; Baumgaertel, Helmut
 CORPORATE SOURCE: Inst. Phys. Chem., Univ. Freiburg i Br., Freiburg/Br., Fed. Rep. Ger.
 SOURCE: Chemische Berichte (1970), 103(5), 1572-77
 CODEN: CHBEAM; ISSN: 0009-2940
 DOCUMENT TYPE: Journal
 LANGUAGE: German
 OTHER SOURCE(S): CASREACT 73:3835
 AB Refluxing BzCHPhNH2.HCl (I) with p-RC6H4COCl in CGH6 in the presence of pyridine gave 94% BzCHPhNHCO2CGH4R-p (II) (where R = H or NO2). Similarly, I reacted with p-C10H6(CGH4-p)NCOCl-p to give 81-99% p-BzCHPhNHCO(CGH4-p)NCOCHPhR2-p (III) (where n = 0-3). III was refluxed with PCl5 (or POC13) in CHCl3 or treated with concentrated H2SO4 to give p-R(CGH4-p)nR-p (IV) [where R = 4,5-diphenyl-2-oxazolyl, and n = 0-3] in 82-94% yield. Similarly, II gave 2-[p-R-substituted]-phenyl]-4,5-diphenyloxazolones (where R = H or NO2). Refluxing II or III with P2S5 in CHCl3 gave 91% 2-[p-R substituted]phenyl]-4,5-diphenylthiazoles (R = H) or 83-90% IV (where R = 4,5-diphenyl-2-thiazolyl, and n = 1-3), resp.
 IT 27051-92-9
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (cyclization of)
 RN 27051-92-9 HCAPLUS
 CN [1,1'-Biphenyl]-4,4'-dicarboxamide, N,N'-bis(2-oxo-1,2-diphenylethyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 171 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1970:100596 HCAPLUS
 DOCUMENT NUMBER: 72:100596
 TITLE: Synthesis of imidazoles from amide chlorides
 AUTHOR(S): Schneiders, Peter; Heinze, Juergen; Baumgaertel, Helmut
 CORPORATE SOURCE: Inst. Phys. Chem., Univ. Freiburg, Freiburg, Fed. Rep. Ger.
 SOURCE: Synthesis (1970), 2(1), 18-20
 CODEN: SYNTBF; ISSN: 0039-7881
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI For diagram(s), see printed CA Issue.
 AB α,α' -Bis(1,4,5-triphenyl-2-imidazolyl)-p-oligophenyls and α,α' -bis(1,3,4,5-tetraphenyl-2-imidazolyl)-p-oligophenyl dichlorides were prepared from amide chlorides. N-Desylaniline (60.0 g) in dry pyridine was refluxed 2 hr with 10.3 g terephthaloyl chloride to give 81% I (n = 1), m. 246-8° (II). A solution of 30.0 g II in 500 ml dry CHCl_3 was refluxed for 1 hr with 20.8 g PCl_5 and concentrated to give benzene-1,4-bis(carboxylic acid N-phenyl-N-desylimidium chloride) dichloride (III), which was dissolved in CH_2Cl_2 and treated with excess gaseous NH_3 to give 94% IV (n = 1), m. 432-4° (PhNO_2). A solution of III (13.0 g) in CHCl_3 was treated with 6.0 aniline to give 94% V (n = 1), m. 222-4° (EtOH), which (13.9 g) was refluxed in SOCl_2 to give 89% VI (n = 1), m. >500°. I (n = 2), m. 289-92°, I (n = 3), m. 229-31°, IV (n = 2), m. 371-5°, IV (n = 3), m. 319-22°, V (n = 2), m. 286-9°, V (n = 3), m. 390-2°. VI (n = 2), m. >500°, and VI (n = 3), m. >500° were similarly prepared from biphenyl-4,4'-dicarbonyl chloride and p-terphenyl-4,4'-dicarbonyl chloride.
 IT 26261-11-0P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 RN 26261-11-0 HCAPLUS
 CN 4,4'-Biphenyldicarbonylchloride, N,N'-bis(α -phenylphenacyl)- (8CI) (CA INDEX NAME)



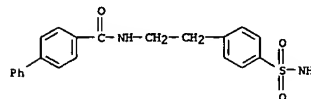
L4 ANSWER 173 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1967:74731 HCAPLUS
 DOCUMENT NUMBER: 66:74731
 TITLE: Histamine releasers. III. Dibasic acid amides of 4-phenyl-4-aminomethylpiperidines
 AUTHOR(S): DeGraw, Joseph I.; Brown, Vernon H.; Kontaxis, Nicholas E.; Ferguson, Samuel A.; Gordon, Gale Ross; Peters, John Henry; Skinner, Wilfred A.
 CORPORATE SOURCE: Stanford Res. Inst., Menlo Park, CA, USA
 SOURCE: Journal of Medicinal Chemistry (1967), 10(2), 174-7
 CODEN: JMCJAR; ISSN: 0022-2623
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB cf. CA 66, 1276p. A series of 1-alkyl-4-phenyl-4-aminomethylpiperidine amides of various dibasic acids were found to have histamine-releasing activity in dogs. The most potent compound was 4,4'-dimethyl-N,N'-4-phenyl-4-piperidylmethylterephthalamide. An exploration of the structure-activity relation in this area is described.
 IT 15234-97-6P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 RN 15234-97-6 HCAPLUS
 CN 4,4'-Biphenyldicarbonylchloride, N,N'-bis[1-methyl-4-phenyl-4-piperidylmethyl]- (8CI) (CA INDEX NAME)



L4 ANSWER 172 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1970:3228 HCAPLUS
 DOCUMENT NUMBER: 72:3228
 TITLE: Benzenesulfonyl ureas
 INVENTOR(S): Weber, Helmut; Aumüller, Walter; Weyer, Rudi; Muth, Karl; Schmidt, Felix; Helmut
 PATENT ASSIGNEE(S): Farbwerke Hoechst A.-G.
 SOURCE: U.S., 25 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 5
 PATENT INFORMATION:

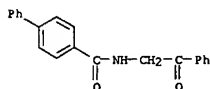
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|----------|
| US 3426067 | A | 19690204 | US 1964-403641 | 19641013 |

PRIORITY APPLN. INFO.:
 AB An addnl. 200 compds., chemical and physiol. similar to those reported earlier (CA 62: 13092a; CA 66: 18606z), are described.
 IT 25200-24-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 RN 25200-24-2 HCAPLUS
 CN 4-Biphenylcarboxamide, N-(p-sulfamoylphenethyl)- (8CI) (CA INDEX NAME)

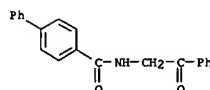


L4 ANSWER 174 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1963:73290 HCAPLUS
 DOCUMENT NUMBER: 58:73290
 ORIGINAL REFERENCE NO.: 58:12538c-h, 12539a
 TITLE: Amino ketone syntheses V. Preparation of 2-(κ -biphenyl)-5-aryloxazoles by Friedel-Crafts reaction of azlactones with aromatic hydrocarbons. Electronic absorption spectra of 2,5-diaryloxazoles
 AUTHOR(S): Balaban, A. T.; Bally, Iona; Frangopol, P. T.; Bacescu, Maria; Clorancescu, Ecaterina; Birladeanu, Ludmila
 CORPORATE SOURCE: Inst. At. Physics, Bucharest, Rom.
 SOURCE: Tetrahedron (1963), 19, 169-76
 CODEN: TETRAH; ISSN: 0040-4020
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 OTHER SOURCE(S): CASREACT 58:73290
 GI For diagram(s), see printed CA Issue.
 AB cf. CA 57, 2205f. Friedel-Crafts condensation of the azlactone (I) of κ -PhCGH4CONHCH2CO2H (II) with aromatic hydrocarbons, ArH, gave high yields of ketones, κ -PhCGH4CONHCH2CO2Ar (III), dehydrated to 2-(p-biphenyl)-5-aryloxazoles (IV). Treatment of ArCl with Ph2 in the presence of AlCl_3 in CS_2 yielded 61% κ -AcCGH4Ph, oxidized by NaOBr in aqueous dioxane to yield 95% κ -PhCGH4CO2H, m. 218°. Treatment of the acid with SOCl_2 and dilution with ligroine yielded 84% κ -PhCGH4COCl, m. 109°. $\text{H}_2\text{NCH}_2\text{CO}_2\text{H}$ (40 g.) and 11 g. NaOH in 400 ml. 1:1 H_2O -dioxane stirred at 0° (external cooling) with gradual addition of 11 g. NaOH in 100 ml. H_2O and 54 g. κ -PhCGH4COCl in 400 ml. dioxane and the mixture stirred 1 hr., the clear solution made strongly acid with HCl , and the H_2O -washed product (60 g.) recrystd. from alc. gave II, m. 219°; amide m. 185-6° (H_2O). II (51 g.) heated 15 min. at 100° in 250 g. Ac_2O and the cooled product washed thoroughly with Et_2O yielded 39 g. I, m. 164° (ligroine). ArH and solvent [(ClCH2)2 except for CGH6, PhMe, and m-Me2CGH4] stirred with powdered AlCl_3 at 0° (ice bath) with gradual addition of I, the mixture stirred 2 hrs., kept 16 hrs. at 20°, hydrolyzed with ice and HCl , filtered (with addition of Et_2O if necessary), and the product washed with Et_2O gave III [Ar, m.p. (solvent), and % yield]: Ph, 176-7° (alc.), 95%; κ -MeCGH4, 186° (alc.), 96%; 2,4-Me2CGH3, 165° (alc.), 98%; α -ClOH7, 199-200° (alc.), 50%; 4-acenaphthyl, 189° (alc.), 92%; 4-PhCGH4, 259° (CHCl3-alc.), 91%; 4-cyclohexylphenyl, 213-14° (alc.), 53%; 2-fluorenyl, 235-6° (CHCl3-alc.), 100%; 3-phenanthryl, 232° (CHCl3-alc.), 40. III heated 2 hrs. on a boiling H_2O bath with 8 parts POCl_3 and the hydrolyzed material filtered gave 90-98% IV [Ar and m.p. (solvent) given]: Ph, 110° (alc.); κ -MeCGH4, 153-4° (alc.); 2,4-Me2CGH3, 123-4° (alc.); α -ClOH7, 159-60° (alc.); 4-acenaphthyl, 165-7° (alc.); 4-PhCGH4, 232-3° (CHCl3-alc.); 4-cyclohexylphenyl, 133° (alc.); 2-fluorenyl, 229-30° (alc.); 3-phenanthryl, 171° (alc.). The ultraviolet spectra of IV were determined in cyclohexane and the maximum (absorption bands C, B, A) tabulated in comparison with similar data for 2-phenyl- and 2-(1-naphthyl)-5-aryloxazoles (V, VI). The tabulation permitted division of the maximum for IV into 3 groups, Ar being κ -MeCGH4, 2,4-Me2CGH3 cyclohexylphenyl, 1-C10H7-4-acenaphthyl, 3-phenanthryl, and 4-PhCGH4, 2-fluorenyl, designated U, N, and B groups, resp. The 9 spectral types (3 each for IV, V, VI) were reduced to 6 types by taking into account the similarity between oxazoles in which no distinction is made between the 2- and 5-positions and the fact that the letters U, N, and B indicate not only Ph, 1-C10H7, and 4-PhCGH4, but also the other

- L4 ANSWER 174 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN (Continued)
 compds. pertaining to the same group. The av. values of λ and ϵ for the 6 types NNO, NBO, BBO, NNO, NBO, NNO (D stands for oxazole) are tabulated [type, λ , in m μ for bands C, B, A ($\epsilon \times 10^{-4}$), calcd. λ in m μ for A given]: PPO, 225, 255, 305 (2.2, -- 3.2), 281; NBO, 220, 265, 325 (1.5, 1.1, 4.0), 319; BBO, 230, 280, 330 (1.8, 1.4, 4.5), 330; NNO, 240, 280, 335 (3.8, 1.7, 2.8), 335; NBO, 245, 295, 340 (3.0, 2.0, 3.5), 344; NNO, 240, 300, 345 (5.4, --, 2.5), 361. Considering the sequences NNO-NBO-BBO, NNO-NBO, and NNO-NBO ($\epsilon = N$ or Π) it was shown that on replacing Ph by 4-PhCGH₄, bands A and B underwent bathochromic and hyperchromic effects and band C a pronounced hypochromic effect, whereas replacement of Ph by 1-C10H₇ caused a bathochromic and hypochromic effect on band A, a large bathochromic and hypochromic effect on band B, and a very large hyperchromic effect on band C. Calc'n. according to Dewar (CA 47, 1489c) using the relation $\lambda = 225/\epsilon_{\text{calc}}$ (where 225 reflects the larger polarization of the 2,5-disubstituted oxazole nucleus relative to π -diarylbenzene, $\lambda = 208/\epsilon_{\text{calc}}$) gave the tabulated, calcd. values.
- IT 37061-74-8, 4-Biphenylcarboxamide, N-phenacyl-
 (preparation of)
- RN 37061-74-8 HCAPLUS
- CN [1,1'-Biphenyl]-4-carboxamide, N-(2-oxo-2-phenylethyl)- (9CI) (CA INDEX NAME)



- L4 ANSWER 175 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN (Continued)
 308-9°. The following 2,5-diarylloxazoles were prepd. (aryl groups, m.p. of I and m.p. of III given): p-PhCGH₄, p-PhCGH₄, 232-3°, 257-9°; 1-C10H₇, 1-C10H₇, 90-1°, 144-5°; p-PhCGH₄, 1-C10H₇, 163-4°, 131-2°; 2-C10H₇, 1-C10H₇, 127-8°, 140-1°; 2-C10H₇, 2-C10H₇, 187-8°, 203-4°; p-PhCGH₄, 2-C10H₇, 197-8°, 204-5°; 2-C10H₇, p-MeOC₆H₄, 114-15°, 154-5°; p-PhCGH₄, p-MeOC₆H₄, 160-7°, 185-7°. p-MeOC₆H₄SO₃Me (3.7 g.) and 3.7 g. 2,5-di(4-biphenyl)loxazole heated 1.5 days at 100°, the viscous liq. cooled and dissolved in a small amt. MeOH, and the soln. dild. with dry Et₂O and cooled gave 7.3 g. 2,5-di(4-biphenyl)-3-methyloxazolium p-toluenesulfonate, m. 214-16°. Similarly were prepd. the 2,5-di-Ph analog, m. 170-2°, the corresponding perchlorate, m. 177-8°, and 2-(1-naphthyl)-5-phenyl-3-methyloxazolium p-toluenesulfonate, m. 144-5°.
- IT 37061-74-8, 4-Biphenylcarboxamide, N-phenacyl-
 (preparation of)
- RN 37061-74-8 HCAPLUS
- CN [1,1'-Biphenyl]-4-carboxamide, N-(2-oxo-2-phenylethyl)- (9CI) (CA INDEX NAME)



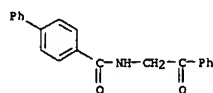
- L4 ANSWER 175 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 1956:12293 HCAPLUS
 DOCUMENT NUMBER: 50:12293
 ORIGINAL REFERENCE NO.: 50:2553e-1,2554a-c
 TITLE: 2,5-Diarylloxazoles and 2,5-diaryl-1,3,4-oxadiazoles
 AUTHOR(S): Hayes, F. Newton; Rogers, Betty S.; Ott, Donald G.
 CORPORATE SOURCE: Univ. of California, Los Alamos, NM
 SOURCE: Journal of the American Chemical Society (1955), 77, 1850-2
 CODEN: JACSAT; ISSN: 0002-7863
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 OTHER SOURCE(S): CASREACT 50:12293
- AB A number of previously unreported 2,5-diarylloxazoles (I) and 2,5-diaryl-1,3,4-oxadiazoles (II) have been prepared by the cyclization of the corresponding 1,4-diaryl-2-aza-1,4-diketones (III) and 1,2-diarylhydrazines. p-CGH₄(COC1)2 (25.0 g.) in 300 cc. dry pyridine treated slowly with 43.0 g. phenacylammonium chloride, the mixture refluxed 15 min., and the crude product filtered, dried, and recrystd. from about 2 l. pyridine gave 28.5 g. p-CGH₄(CONHCH₂2)2 (IV), m. 262-8°. IV (13.5 g.) in 500 cc. POCl₃ refluxed overnight, most of the POCl₃ distilled off, the residue added slowly to H₂O, and the precipitate filtered, washed with H₂O, dried, and recrystd. from pyridine yielded 10.3 g. 1,4-bis[2-(5-phenyl-2-oxazolyl)]benzene, m. 237-8°. Similarly was prepared 1,4-bis[5-(4-biphenyl)-2-oxazolyl]benzene, m. 292-4°, from the corresponding III, m. 250°. BzNH₂ (10 g.) added with stirring to 16 g. p-PhCGH₄COC1 in 100 cc. dry pyridine, the mixture refluxed 20 min., cooled, and diluted with H₂O, and the precipitate dried and recrystd. from PhMe yielded 13.3 g. p-PhCGH₄(CONHCH₂2)2 (V), m. 222-4°. V (76 g.) in 200 POCl₃ gently refluxed overnight yielded in the usual manner 52.0 g. 2-phenyl-5-(4-biphenyl)-1,3,4-oxadiazole, m. 166-7°. By these methods were prepared the following 2-aryl-5-phenylloxazoles (aryl group, m.p. of I, and m.p. of III given): o-FCGH₄, 84-5°, 116-17°; m-FCGH₄, 69-70°, 128-9°; p-FCGH₄, 81-2°, 134-5°; p-ClCGH₄, 115-16°, 148-8.5°; 2,4-Cl₂CGH₃, 116-16.5°, 122.5-23°; 3,4-Cl₂CGH₃, 124.5-25°, 146.5-47°; o-BrCGH₄, 71-2°, 115.5-16.5°; m-BrCGH₄, 86-7°, 129-30°; p-BrCGH₄, 115-16°, 164-5°; o-ICGH₄, 78.5-9.5°, 111.5-12.4°; m-ICGH₄, 112-13°, 146-7°; p-ICGH₄, 130-1°, 163-5°; o-MeOC₆H₄, 145-6°, 102-3°; m-MeOC₆H₄, 79-80°, 80-1°; cyclohexyl, 87°, 113-14°; 2-C10H₇, 110-11°, 148°; p-PhCGH₄, 112-13°, 181-2°; 2-thienyl, 67-8°, 140-1°; 2-furyl, 68-9°, 138°; 2-(5-phenylloxazolyl), 242-3°, 198-200°. The following 2,5-diaryl-1,3,4-oxadiazoles were prepared (aryl groups, and m.p. of II given): Ph, 2-furyl, 103-3.5°; Ph, 2-thienyl, 117-18°; p-PhCGH₄, p-PhCGH₄, 229-30°; Ph, 1-C10H₇, 120°; Ph, 2-C10H₇, 122-4°; p-MeOC₆H₄, 2-C10H₇, 148°; p-MeOC₆H₄, 1-C10H₇, 142-3°; p-MeOC₆H₄, p-PhCGH₄, 155°; p-ICGH₄, p-ICGH₄, 276°; p-FCGH₄, p-FCGH₄, 200-2°; p-ClCGH₄, p-ClCGH₄, 242-3°; p-MeOC₆H₄, p-MeOC₆H₄, 161-2°; 2-furyl, 2-furyl, 141-2°; 2-thienyl, 2-thienyl, 117-18°; 2-styryl, 2-styryl, 151-2°; 1-C10H₇, 1-C10H₇, 175-7°; 2-C10H₇, 2-C10H₇, 187-9°. 1,4-bis-(5-phenyl-1,3,4-oxadiazol-2-yl)benzene m.

- L4 ANSWER 176 OF 177 HCAPLUS COPYRIGHT 2006 ACS ON STN
 ACCESSION NUMBER: 1955:39448 HCAPLUS
 DOCUMENT NUMBER: 49:39448
 ORIGINAL REFERENCE NO.: 49:7559g-1,7560a-e
 TITLE: Liquid solution scintillators
 AUTHOR(S): Rogers, Betty S.; Sanders, Phyllis; Schuch, Robert L.; Williams, D. Lloyd; Hayes, F. Newton
 CORPORATE SOURCE: Los Alamos Sci. Lab., Los Alamos, New Mex.
 SOURCE: U.S. Atomic Energy Comm. (1953), LA-1639, 75 pp.
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
- GI For diagram(s), see printed CA issue.
- AB Syntheses are described, and m.p. values and analytical data given for 12 derivs. of BzCH₂NHCO₂ (I), 9 derivs. of RCOCH₂NHCO₂ (II), p-CGH₄(COCH₂NHCH₂2) (III), (BzCH₂NHCO₂)₂ (IV), 5 derivs. of RCONHCH₂CO₂ (V), 20 derivs. of PhC(CH₃)₂CH₂CO₂ (VI), 2 derivs. of p-CGH₄(C(CH₃)₂CH₂CO₂)₂ (VII), 12 derivs. of RC(CH₃)₂CH₂CO₂ (VIII), and 4 derivs. of RC(CH₃)₂CH₂CO₂ (IX). I-V are merely intermediates for the preparation of the liquid solution scintillators VI-IX. I-IV, VI, and VII were prepared in general according to Lister and Robinson (C.A. 7, 326). V (R = Ph, R' = 2-furyl) was prepared by refluxing 50 g. BzOEt and 50 ml. 85% aqueous N₂H₄.H₂O 15 min. and then 2 hrs. after adding 200 ml. EtOH; the resulting BzNHCH₂2 (79%), m. 111-130 (10 g.) was added to 9.6 g. furoyl chloride in 100 ml. C₅H₅N with stirring, and the mixture refluxed 20 min., and treated with H₂O to precipitate VII, m. 223-4°. Other V were similarly prepared, and VIII from these according to Stolle [Ber. 32, 797(1899)]. IX (R = R' = Ph, X = p-MeOC₆H₄SO₃) (85%), m. 170-2°, was prepared by heating 1 day at 100° in an oil bath 2.2 g. VI (R = Ph) with 3.7 g. p-MeOC₆H₄SO₃Me cooling, adding MeOH to give a concentrated solution, and finally dry Et₂O.

The

following 38 compds. have not been previously reported: (for VI, R and m.p. given) 2-FCGH₄, 84-5°; 3-FCGH₄, 69-70°; 4-FCGH₄, 81-2°; 4-ClCGH₄, 115-16°; 2,4-Cl₂CGH₃, 116-16.5°; 3,4-Cl₂CGH₃, 124.5-5.0°; 2-BrCGH₄, 71-2°; 3-BrCGH₄, 86-7°; 4-BrCGH₄, 115-16°; 2-ICGH₄, 78.5-9.5°; 3-ICGH₄, 112-13°; 4-ICGH₄, 130-1°; 2-MeOC₆H₄, 145-6°; 3-MeOC₆H₄, 79-80°; 2-furyl, 68-9°; 2-thienyl, 67-8°; 2-naphthyl, 110-11°; 4-biphenyl, 112-13°; 2-(5-phenylloxazolyl), 242-3°; 2,5-di(biphenyl)loxazole, 232-3° (for VII, R and m.p. given) Ph, 237-8°; 4-biphenyl, 292-4° (for VIII, R, R', and m.p. given) 4-FCGH₄, 4-FCGH₄, 200-2°; 4-ClCGH₄, 4-ClCGH₄, 242-3°; 4-MeOC₆H₄, 4-MeOC₆H₄, 161-2°; 2-furyl 2-furyl, 141-2°; 2-thienyl 2-thienyl, 117-18°; α -styryl, α -styryl, 151-2°; 1-naphthyl, 1-naphthyl, 175-7°; 2-naphthyl, 2-naphthyl, 187-9°; 4-biphenyl, 4-biphenyl, 229-30°; Ph, 2-furyl, 103-3.5°; Ph, 2-thienyl, 117-18°; Ph, 4-biphenyl, 166-7° (for IX, R, R', X, and m.p. given) Ph, Ph, ClO₄, 177-88°; Ph, Ph, p-MeOC₆H₄SO₃, 170-2°; 4-biphenyl, 4-biphenyl, p-MeOC₆H₄SO₃, 14-16°; Ph, 1-naphthyl, p-MeOC₆H₄SO₃, 144-5°. No syntheses of solvents were necessary, but their more complete purification probably accounts for apparent discrepancies between the present results and those of Kallman and Furst (C.A. 45, 10073h). A general comparative study of aromatic and aliphatic solvents shows the former, because of their resonance properties, able to transfer energy to the solute at lower levels. Emission spectra of 3 g./l. PhMe solns. of the 38 solutes were run with Ra excitation; energy transfer between solutes was noted by this method with PhMe solns. of 2 solutes and the absorption spectra in cyclohexane and the photon mean free path data were obtained. Relative photomultiplier anode current and pulse height methods

L4 ANSWER 176 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 of testing were applied, and the results gave information directly
 applicable to counting problems. Uses are described for these liquid
 soln. scintillators in H3 and C14 assay in work of biol. interest, natural
 C14 counting, and detection of the free neutrino.
 IT 37061-74-8, 4-Biphenylcarboxamide, N-phenacyl-
 (preparation of)
 RN 37061-74-8 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-(2-oxo-2-phenylethyl)- (9CI) (CA INDEX
 NAME)



L4 ANSWER 177 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1955:39447 HCAPLUS
 DOCUMENT NUMBER: 49:39447
 ORIGINAL REFERENCE NO.: 49:7559b-g
 TITLE: A new synthesis of DL-2-mercaptohistidine
 AUTHOR(S): Hegedus, B.
 CORPORATE SOURCE: Hoffmann-La Roche & Co., Basel, Switz.
 SOURCE: Helvetica Chimica Acta (1955), 38, 22-7
 CODEN: HCACAV; ISSN: 0018-019X
 DOCUMENT TYPE: Journal
 LANGUAGE: German
 OTHER SOURCE(S): CASREACT 49:39447

AB AcNHCH(CO₂Et)₂ (660 g.) was added to a solution of 70 g. Na in 4 l. EtOH and
 the solvent removed in vacuo. The dry Na-salt was treated with 408 g.
 AcCH₂Br (AcCH₂Cl did not work) in boiling C₆H₆ for 48 h. The washed and
 dried C₆H₆ solution was evaporated to dryness. After dilution with Et₂O
 the residue
 gave 322 g. AcCH₂C(CO₂Et)ZNHAc (I), m. 104-7° (from EtOH). I (160
 g.) dissolved in 740 mL. AcOH was treated with 102 g. Br in 440 mL. AcOH
 at 70-80° for 4-5 min. and the solvent removed in vacuo. After
 dilution with Et₂O the residue gave 130-5 g. CH₂BrCOCH₂C(CO₂Et)ZNHAc (II),
 m.
 95-6° (from ligroine). II (100 g.) dissolved in 600 mL. Me₂NCHO
 was treated with 52.8 g. K salt of phthalimide for 50-70 min. at
 35-40°. After addition of 600 mL. CHCl₃, the solution was washed with
 H₂O, N NaOH, and 3N HCl and dried. Evaporation of the CHCl₃ and addition
 of Et₂O
 gave 91 g. o-C₆H₄(CO)2NCH₂COCH₂C(CO₂Et)ZNHAc (III), m. 170-1° (from
 EtOH). III (8.2 g.) was refluxed in a solution of 1.7 g. LiOH in 200 mL.
 H₂O
 for 2.5-3 h., the pH adjusted to 3-4 with 48% HBr, and the solution boiled
 again for 30 min. Evaporation at pH 2-2.2 gave 3.2 g. o-
 C₆H₄(CO)2NCH₂COCH₂CH(CO₂H)NHAc, m. 238-40° (from EtOH), slightly
 soluble in cold H₂O, very soluble in hot H₂O. III (16.4 g.) was refluxed
 in a
 solution of 4.2 g. NaOH in 120 mL. H₂O and 40 mL. EtOH for 2 h., then 30
 min.
 more after addition of HCl to pH 3-4. Addition of more HCl and evaporation
 gave a
 residue which was dried and treated overnight at room temperature with 200
 mL.
 15% HCl in EtOH. The salt and alc. were removed and the residue
 crystallized
 from H₂O to give 5.4 g. o-C₆H₄(CO)2NCH₂COCH₂CH(CO₂Et)NHAc, m.
 172-4°. III (133 g.) was refluxed in 800 mL. concentrated HCl for 5 h.,
 1 l. H₂O added to the green solution to precipitate o-C₆H₄(CO₂H)₂, and the
 filtrate
 concentrated, filtered over C, and diluted with EtOH to give 67 g.
 NH₂CH₂COCH₂CH(NH₂)CO₂H.2HCl (IV), m. 135-40°, which gave off HCl
 when crystallized from EtOH-H₂O, forming the monohydrochloride, m. 256°
 (decomposition). IV (61 g.) was dissolved in 500 mL. H₂O and treated at
 90-100° with 61 g. KCNS over 30 min., the solution kept at
 80-90° for 1 h., and filtered over C. Neutralization with
 Na₂CO₃.10H₂O to pH 5 gave 26 g. DL-2-mercaptohistidine, decomposing at
 300°. The phthalyl group in III and related compds. was stable to
 hydrazinolysis.
 IT 37061-74-8, 4-Biphenylcarboxamide, N-phenacyl-

L4 ANSWER 177 OF 177 HCAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 (prepn. of)
 RN 37061-74-8 HCAPLUS
 CN [1,1'-Biphenyl]-4-carboxamide, N-(2-oxo-2-phenylethyl)- (9CI) (CA INDEX
 NAME)

